Eurotherm®

by Schneider Electric

System Configuration
User Guide

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SYSTEM CONFIGURATION MANUAL

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1 INTRODUCTION

This document is intended as a guide to Project creation, and to assist in the editing of existing Project information. It summarises how to use some of the Utilities required to ensure successful Project configuration.

Where references for more information in specific manuals occur read the specific help file or refer to

Start > All Programs > … > Online Books

Note: '…' denotes the installation path.

1.1 DOCUMENT CONTENTS

This document primarily describes how to configure a Plant Solution (and its variants). These are projects that contain LIN instruments, configured using LINTools, the variant 'with Operations' just means there is an Operator view created using Wonderware products, and 'Clone Network' is the LIN network part of a Plant Solution that has been created by cloning the LIN instruments that are detected on a LIN network. Chapters 2 to 27 provide the necessary information to perform these configurations.

A Modbus Data provider is a different type of project that does not contain LIN instruments and basically connects a 2500 (Modbus instrument) with the Wonderware front end. Chapter 28 describes how to configure a Modbus Data Provider.

1.2 BUILD NOTES

The 'Build' operation is used to update the Project database with information and changes in the Project. To update the Project database, it must be ensured that ALL Build operations are carried out on the LIN Network containing the changes, preferably using the following command:

Project Organiser > Project > Full Project Build.

This will make sure that any new Instrument is added to the Project database, that any removed Instrument (including all associated Tags) is deleted from the Project database and that any changes to an Instrument are updated in the Project database.

If in doubt Build the entire Project to ensure all amendments are updated in the Project database. This is done automatically via Project Organiser, and LINtools Engineering Studio.

2 CREATING A NEW PROJECT FOLDER

This creates all Editors, Configurators, Utilities, Wizards and Files required to create the Project and stores them in a hierarchical directory structure.

1. Create a new Project folder by starting the new Project wizard.

   Start > All Programs > … > New Project

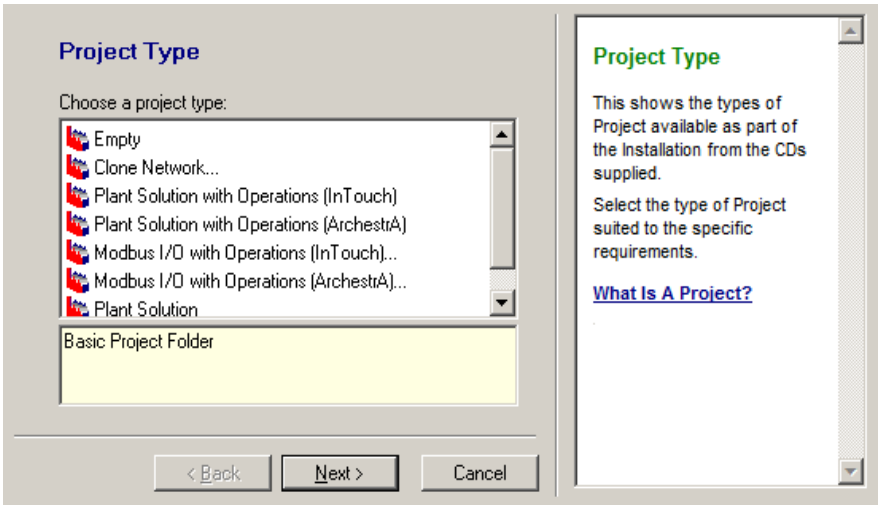
   Note: '…' denotes the installation path.

A New Project can also be created via the shortcut icon on the desktop or from within the LINtools Engineering Studio application.

2. This initiates the New Project Wizard which offers the choice of Project Types depending on the installation and license.

   Select the type of project required.

   Note: For full instructions refer to the help information shown alongside each dialog.



Once created, the Properties of the Project folder allow Project build option configuration.

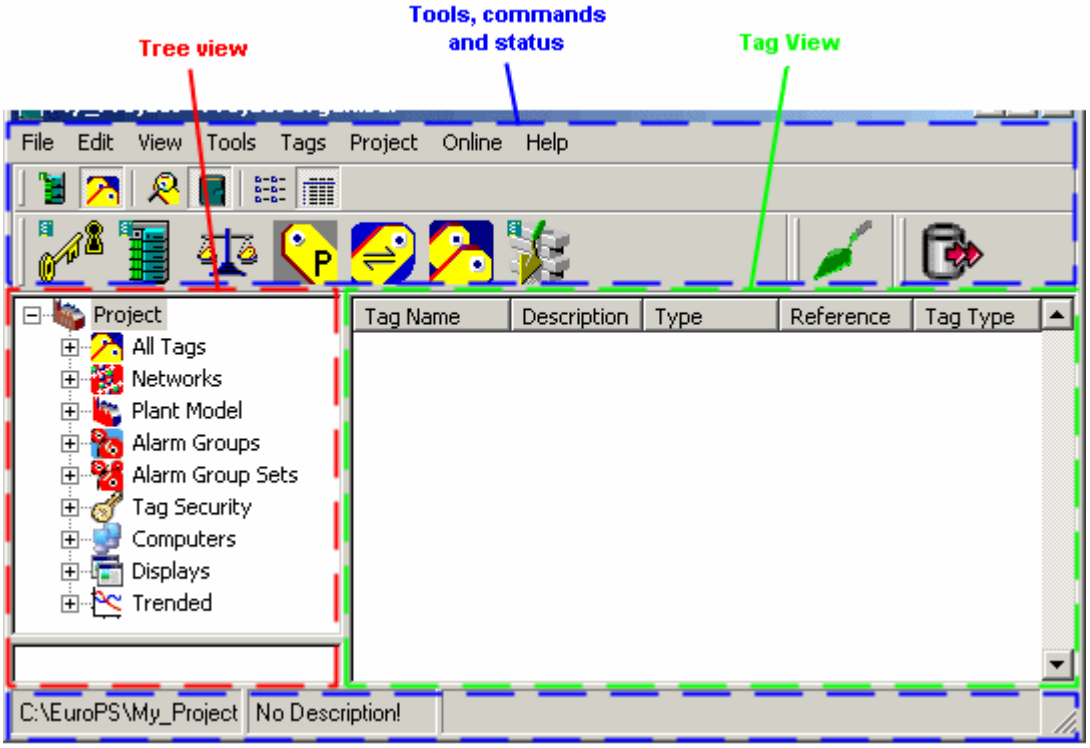
Project	Description
Empty	Empty project folder, without a project database, allowing folders to be created as required.
Clone Network	Project folder replicated from an existing 'Live' plant or system.
Plant Solution with Operations (InTouch)	Distributed LIN instrument system with Wonderware InTouch Operations viewers. This creates a standalone (published) InTouch application.
Plant Solution with Operations (ArchestrA)	Distributed LIN instrument system with Wonderware InTouch Operations viewers. This is a Managed InTouch application, and is edited using the ArchestrA IDE allowing the full range of ArchestrA symbols. The application can be Published at a later stage.
Modbus I/O with Operations (InTouch)	Serial Modbus or Modbus TCP connecting I/O instruments with a single Wonderware InTouch Operations viewer. This creates a standalone (published) InTouch application. See Chapter 28.
Modbus I/O with operations (ArchestrA)	Serial Modbus or Modbus TCP connecting I/O instruments with a single Wonderware InTouch Operations viewer. This creates a managed InTouch application, and is edited using the ArchestrA IDE allowing the full range of ArchestrA symbols. The application can be published at a later stage. See Chapter 28.
Plant Solution	Distributed LIN instrument system, including Project database, with no auto-generated operator view.

3. Follow the instructions shown on each page of the wizard. If the selected Project Wizard includes Wonderware FactorySuite Intouch Software, the Intouch Application Name by default is the same as the Project Name. By default ALL Projects are located in the:

   <Install Drive (generally C:)>:\EuroPS\…

4. Press Finish. It may take a few minutes to create the entire Project folder. All files are copied to the Project. Once complete, the Project will be displayed in the Project Organiser environment.

Notes: For full instructions refer to the Project Organiser Help file. This describes the function of each item, and how to create and configure it.



Note: A default drop location for Tags, Target Drop area shown in the small area in the Tree view, can be defined and changed as required in Project Organiser. This is an item within Project Organiser that requires the attachment of many Tags from throughout the plant/system.

3 CONFIGURING PROJECT PROPERTIES

The Project folder properties are set up to define the Active Project (if not already configured using the New Project wizard), and the location of the Project Database locally on the Computer, and from a Network perspective, i.e. from another Computer or LIN Instrument using the Project Database in the plant/system. The Project folder properties to be configured are,

Set As Active Project. This defines the Active Project instructing LINOPC/LINData/InTouch what Project database to use at runtime.

NOTE: When changing or setting the Active Project, LINOPC and all associated Clients (LINData, Alarm Provider, LINtools Engineering Studio and OPC SCOPE) must be shutdown. Once this has been done, LINOPC can be shut down using the Shutdown LINOPC command.

Start > ... > Utilities > Shutdown LINOPC

Master Computer — This defines the Computer operating as the Master in the plant/system used for Project development.

Master Project Path — This defines the local path to the Project Database.

Master Project UNC Path — This defines the network path to the Project Database.

1. If the Project has been closed, open the new Project folder from

   Start > All Programs > ... > <New Project Name>
   where '...' denotes the installation path.

   Alternatively double click the shortcut icon displayed on the Computer desktop if created.

   Note: Opening the Project using both means, creates separate related windows.

WINDOWS EXPLORER VIEW

Windows Explorer is the secondary method of configuring a Project if Project Organiser is available, but is the primary method when Project Organiser is not available, i.e. prior to version 4.2.

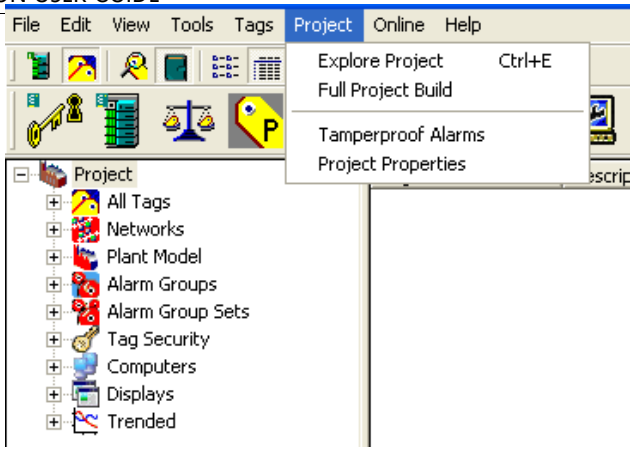
A Windows Explorer view, accessed via the Project > Explore Project command, shows the Project data, the Folders pane displaying the Project folder that includes an InTouch Application of the same name, a History folder that stores files as an historic log, and a Networks folder containing any LIN network already configured from the LINOPC Control Applet and all the associated instruments.

The main part of the Windows Explorer view shows the top-level folders and the installed Utilities.

Note: It is recommended that Project Organiser be used whenever available.

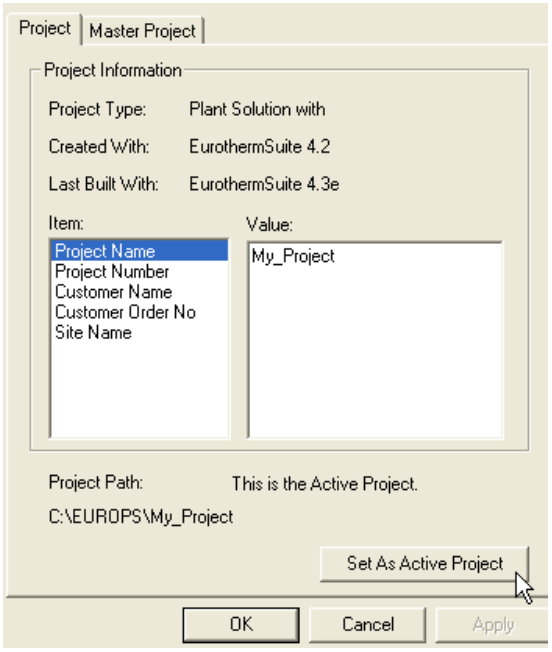
2. Select Properties.

Project > Project Properties



3. Select the Project page.

4. Press the Set Active Project button.



5. Select the Master Project page.

> Note: These and additional parameters can also be edited in the relevant Computer Properties dialog.

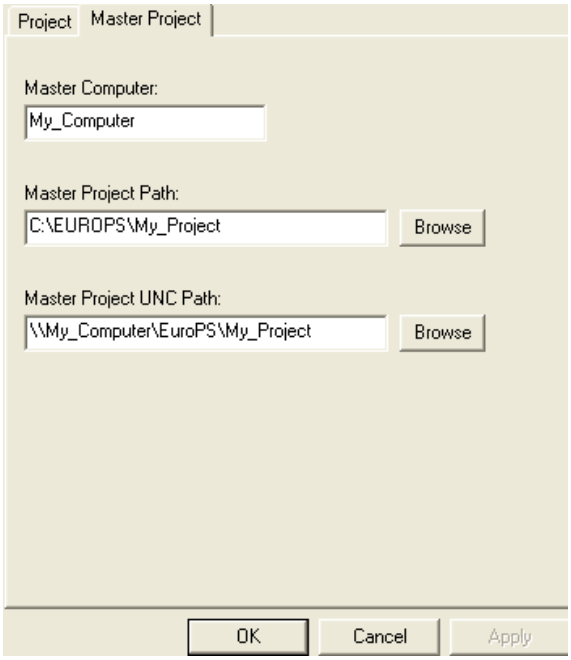
Ensure ALL fields correctly identify the selected Project.

Master Computer: This defines the Computer operating as the Master in the plant/system used for Project development.

Master Project Path: This defines the local path to the Project Database held on this Computer.

Master Project UNC Path: This defines the network path to the Project Database held on this Computer.

> Note: The Master Project UNC Path is a network path and MUST be correctly configured for sharing and security. Ideally, it uses the same Project Name.



6 Click OK to accept all changes made to the Project Properties and close the Properties box.

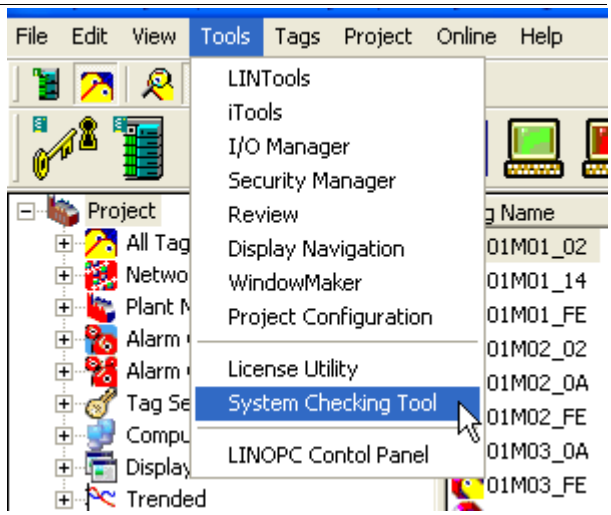
4 CONFIGURING THE INSTALLATION

4.1 SHARED NETWORK PATH USING THE SYSTEM CHECKING TOOL

Note: Any computer to be used to operate the InTouch Application must be correctly configured and have appropriate compatible NT login User accounts stored locally.
Use the System Checking Tool to edit these parameters (refer to the Project Organiser Help file for full instructions).

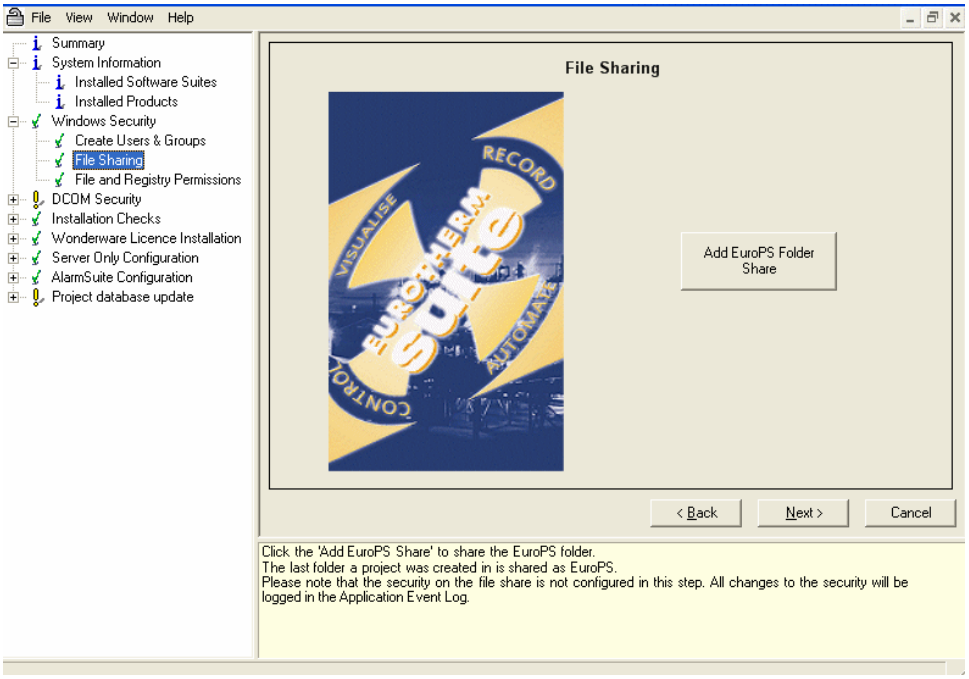
1. Assuming that Project Organiser has remained open, launch the System Checking Tool by selecting the Tool > System Checking Tool command.
2. The Shared Network path is automatically configured using the File Sharing option. Alternatively, by selecting each section in turn, and using the buttons displayed in the main part of the window, a default configuration is applied, which is sufficient for most Projects.

Note: Additional information, relating to the item selected in the left pane, is displayed below the main part of the window.



DCOM Security can also be configured using this Tool. It automatically configures shared connections to LINOPC through Windows DCOM Service.

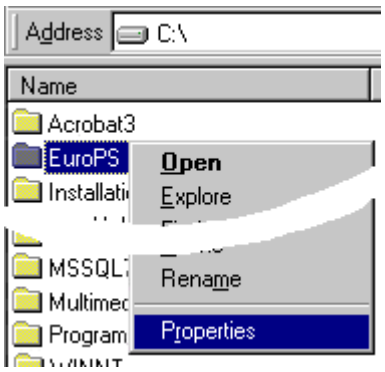
If an imported Project was created using an earlier version, the Project Database may need to be updated. A button in the Project database update section initiates a wizard to upgrade the Project Database and Security Database to the version used by this installation.



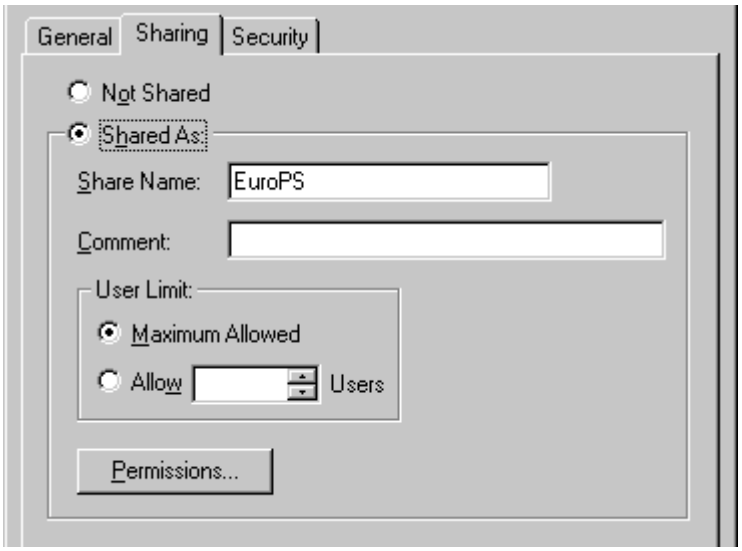
4.1.1 Configuring the Shared Network Path using Windows Explorer

As stated above, any computer that will run the InTouch Application MUST have a **Shared** network path for the **Project** database.

1. Open Windows Explorer.
2. Find and select the EuroPS directory. C:\EuroPS
3. Select Properties. File > Properties



4. Select the Sharing tab.
5. Click the Shared As radio button to activate Shared operation.
6. Press the Permissions button and make sure it is set to Full Permissions.



Note: A Project folder must be created and renamed at C:\EuroPS\MyProject on each client computer, using File > New > Folder and then File > Rename

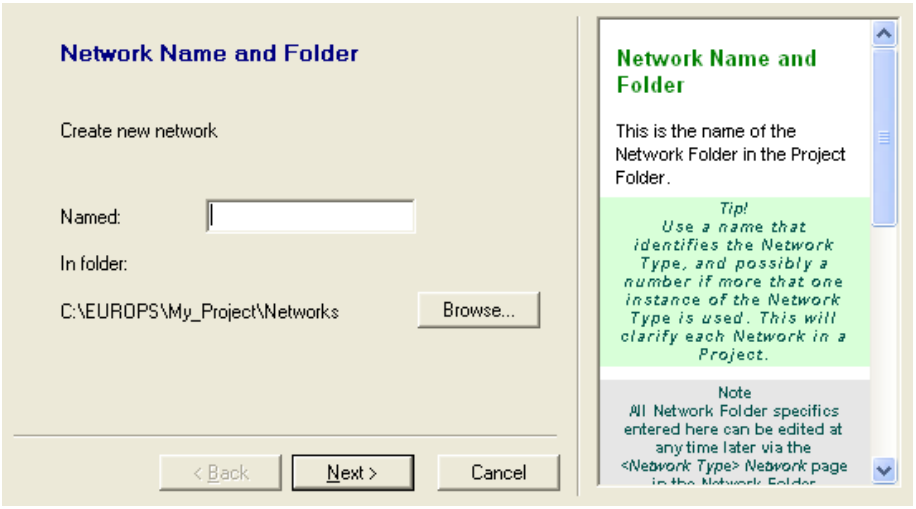
5 CREATING LIN NETWORK FOLDERS

LIN Network folders are created to store all the files and subfolders related to each network in the Project, and to provide easy access to the Online Monitoring and Download operations.

> Note: A Build operation is done automatically from Project Organiser after a Network folder has been created or deleted to update the Project database. Build is NOT required when only the properties of the Network folder are being edited.

1. Assuming that Project Organiser has remained open, select the Networks folder.
2. Create a LIN Network folder by launching the New Network wizard.
   File > New Network

   Alternatively, the wizard can be launched by pressing  . Each LIN network corresponds to a physical network in the system.



3. This initiates the New Network Wizard. After an appropriate Network name has been entered, it offers the choice of Network Types.

   > Note: It is recommended that to simplify the identification of a Network, <Network Type>_<Network number> convention should be used, e.g. ELIN_01.

   A New Network folder can also be created from within the LINtools Engineering Studio application in an existing Project or a New Project.

Network Type	Definition
LIN	Local Instrument Network. Supports peer to peer communications between Computers and instruments with LIN database files.
MODBUS	Supports communications between T800/ T940 instruments and the 2500I/O system with single Wonderware InTouch Operations viewer.
PROFIBUS	PROFIBUS supports communications between T800 or T940 Instruments and the 2500 I/O system.
EI-BISYNCH	EI-BISYNCH supports communications with PC3000 devices including 2000 series Controllers, PC3000 and PC300.

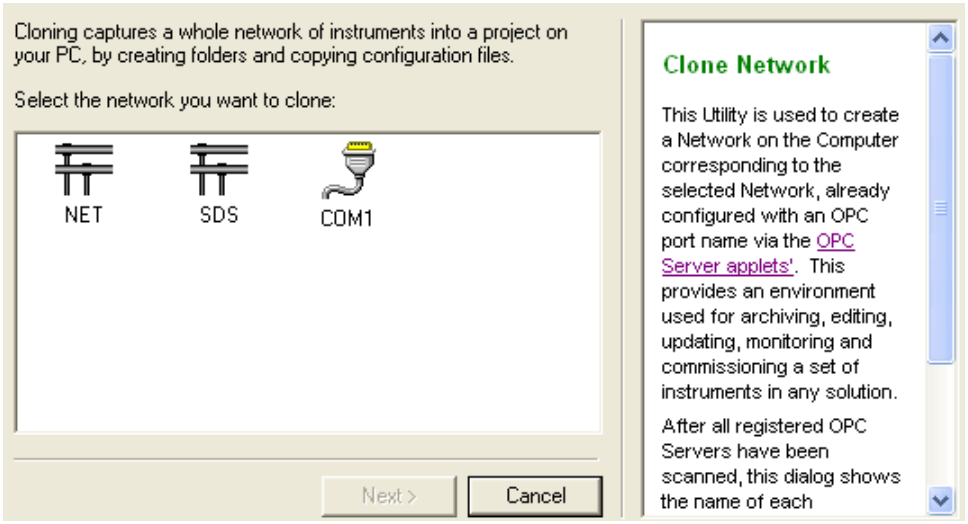
4. Follow the instructions shown on each page of the wizard.
5. Click on the ‘Finish’ button. This automatically launches the Build process which may a few minutes to create the Network Type folder.

5.1 CLONE A NETWORK

LIN Network folders, including all instrument and further sub-networks and instruments can be easily created in Project Organiser from an existing 'Live' Plant/system network using the Clone Network wizard.

Assuming that Project Organiser has remained open, select the Networks folder:

1. Clone an existing LIN Network by launching the **Clone Network wizard**.
2. Launched by pressing  .
3. Each LIN network corresponds to a physical network in the system.



Note: Individual Instrument folders can also be copied from an existing 'Live' plant/system using the Clone Network Wizard.

5.2 ONLINE MONITORING AND DOWNLOAD USING NETWORK FOLDERS

The Properties of each LIN Network folder allows a LINOPC port to be selected and configured to be used to Download, Start, Stop and Monitor the LIN configurations in that network.

This setting is required only if you wish to allow Downloading, Starting and Stopping of instruments in this Network folder from the context menu and File menu of each instrument. In addition, the LIST.UJD file in each instrument folder can be configured using LINtools Engineering Studio to specify which files are to be downloaded.

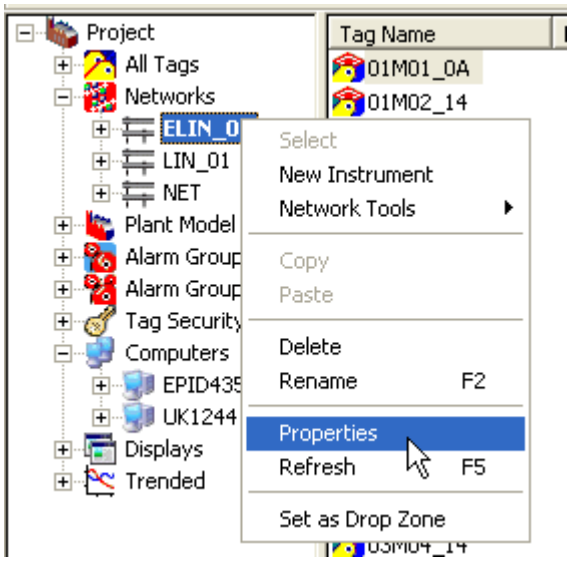
If this is not configured, the context menu and File menu for the LIN instrument folders will have the Download, Start and Stop options disabled and greyed out. These operations can still be carried out using the Network Explorer, but the user must know which files are relevant for the respective instruments.

This can be reconfigured at any time from here on.

> Note: A Build operation is not required if only the Properties of the Network folder are being edited. However, LINOPC may have to be restarted if the changes are not recognised by Project Organiser.

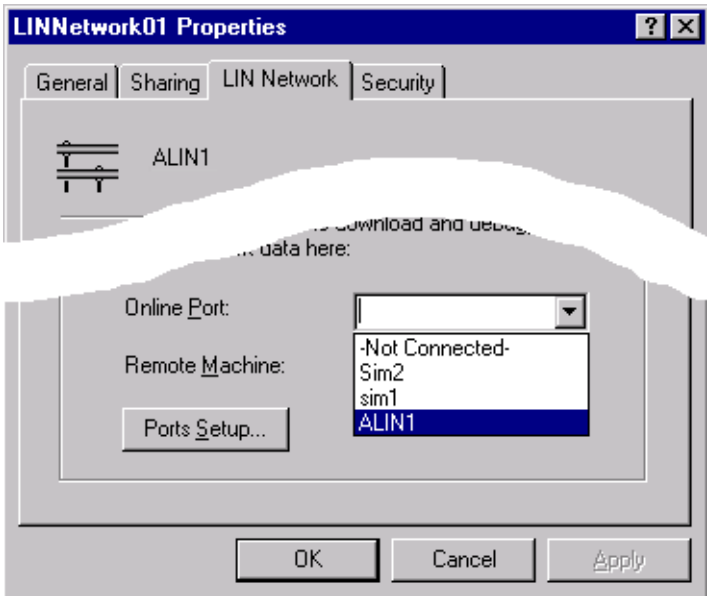
5.2.1 Changing a LIN OPC port

1. Select the LIN Network folder icon to reveal the context menu.
2. Select Properties. This shows the LIN Network tab.



3. Change the Online Port and Remote Machine fields if required. (This is normally configured using the 'New Network' wizard.)

> Note: Use the Ports Setup button to Add, Edit or Delete Port Names. This opens the LINOPC control applet, that can also be launched by pressing  .



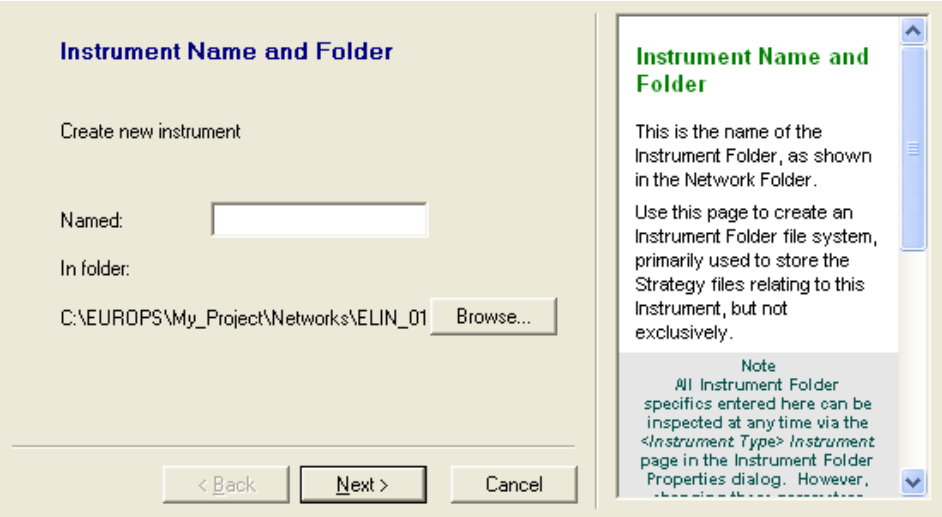
4. Close the Properties window.

> Note: A build operation is required only if the Properties of the Network folder are to be edited. However, LINOPC may have to be restarted if the changes are not recognised by Project Organiser.

6 CREATE LIN INSTRUMENT FOLDERS (INSTRUMENTS)

The LIN Instrument folders are created to store ALL the LIN Instrument configuration files related to each LIN Instrument in the associated Network. The file menu for LIN Instrument folders also includes the control of Online Monitoring and Download operations with the inclusion of the Download, Start and Stop options. If these are greyed out, they are unavailable because the Network folder above the instruments has not been configured for this purpose.

The Properties of each LIN Instrument folder allow you to tell the system what type, version, address, database name (header block name) and filename that instrument should have.



1. Assuming that Project Organiser has remained open, expand the Networks folder.
2. Open the LIN Network folder.
3. Create a LIN Instrument folder by launching the New Instrument wizard.
   File > New Instrument

   Alternatively, the folder can be launched by pressing  .
   Each Instrument corresponds to a physical instrument on the associated network.
4. This initiates the New Instrument Wizard. After an appropriate Instrument name has been entered, it offers the choice of hardware parameters, i.e. type, and version, and Strategy parameters.

   Note: To simplify the identification of an Instrument, it is recommended that a <Instrument Type>_<Node number> convention, e.g. T2750_01 be used.

   A New Instrument folder can also be created from within the LINtools Engineering Studio application for either an existing Network or a new Network, in an existing Project or a New Project. The Instrument folder contains an Instrument Database file (.dbf), that includes a default range of LIN Diagnostic function blocks.

   Each block is named automatically, and the associated Tagnames are included in the Tag view.
5. Follow the instructions shown on each page of the wizard.

Press the 'Finish' button to launch the Build process. This may take a while to create the Instrument folder.

6.1 CLONING AN INSTRUMENT

LIN Instrument folders, including all sub-networks and instruments can be created in Project Organiser from an existing 'Live' Plant/system network using the Clone Network wizard.

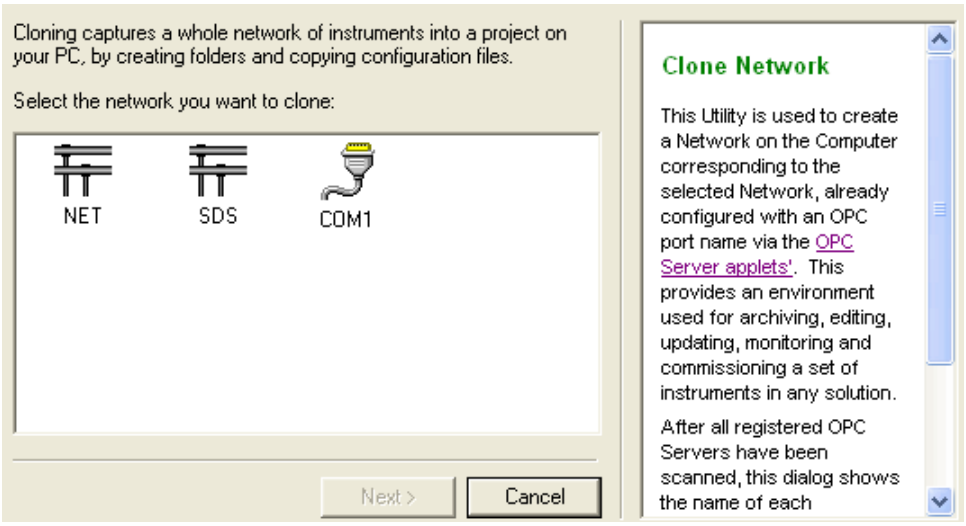
> Note: Entire Network folders can also be copied from an existing 'Live' plant/system using the Clone Network Wizard.

1. Assuming that Project Organiser has remained open, select the Networks folder.
2. Clone an existing LIN Instrument by launching the Clone Network wizard. Launched by pressing  .

   Each LIN Instrument corresponds to a physical instrument in the system.
3. In the Clone Network wizard, locate and open the Network containing the required LIN Instrument.

   The wizard copies the requested files contained in the 'Live' Instrument to the Project Organiser Instrument folder. However, the Instrument Database file (.dbf), including the LIN function blocks are always copied, and the associated Tagnames added to the Tag view.

Each block is named automatically, and the associated Tagnames included in the Tag view.



6.2 CHANGING LIN INSTRUMENT PROPERTIES

The LIN Instrument folder name and Instrument Version Properties can be changed, but the latter requires some additional editing.

6.2.1 Changing a LIN Instrument folder name

A LIN Instrument folder name can be changed simply by replacing the icon name. The build process will automatically understand that the name has changed.

6.2.2 Updating a LIN Instrument Version

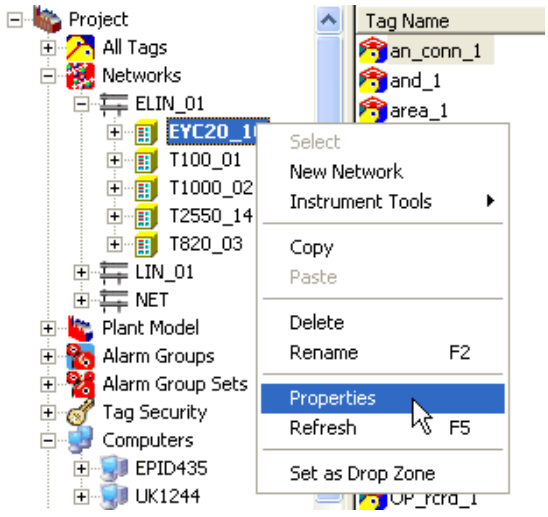
A LIN Instrument Version can be updated to a later version by opening the Instrument database file (.dbf), deleting the Header Block, and then creating a new Header Block of the correct version, all within LINtools Engineering Studio. The Instrument Version must also be changed in the Instrument Properties (See below).

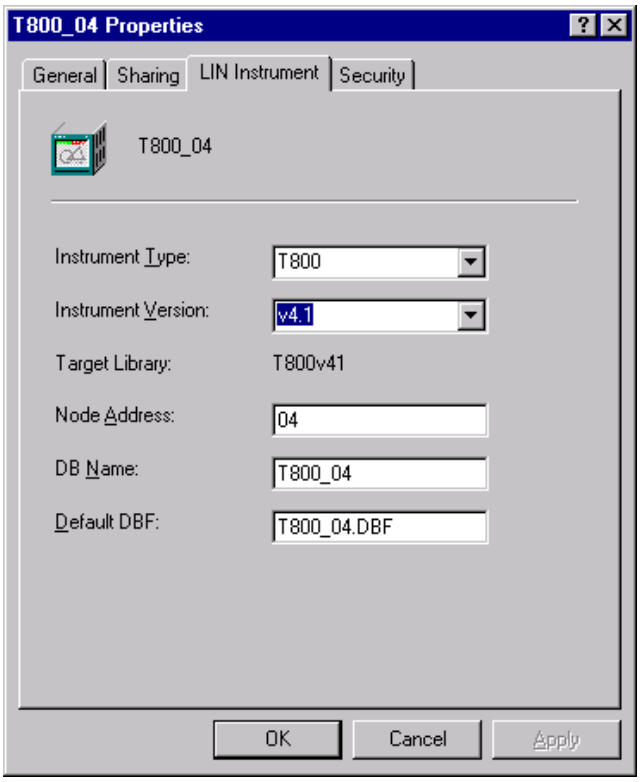
CAUTION

These instructions cause the T640, T100, T102, and T103 Instruments to lose all I/O allocations because the site/channels are tied into the Header Block.

6.2.3 Changing a LIN Instrument properties

1. Select the LIN Instrument icon to reveal the context menu.
2. Select Properties. This shows the LIN Instrument tab.
3. Change the appropriate fields as required.
4. Close the Properties window.





6.3 MOVING BLOCKS BETWEEN LIN INSTRUMENTS

Note: This is not the same as caching blocks.

If a LIN Block is to be moved between LIN Instruments, failure to follow the instructions below may result in the creation of a new Tag in the Project database. This would have a Tagname with an '_1' suffix because the Build operation processes the target instrument before the source instrument. As it had not deleted the source block, it could not create a new Tag with the same name, so it must create a new Tag with a different name, hence the '_1' suffix.

1. Delete the block from the source instrument and Build it. This will detach the Tag in the Project database.
2. Add the block to the target instrument and Build it. The Build will see that there is a new block and a detached Tag and will match them up.

Notes:

1. When updating the Project database ensure that all Build operations are carried out on the LIN Network containing the changes.
2. For full instructions refer to the Frequently Asked Questions.

WARNING

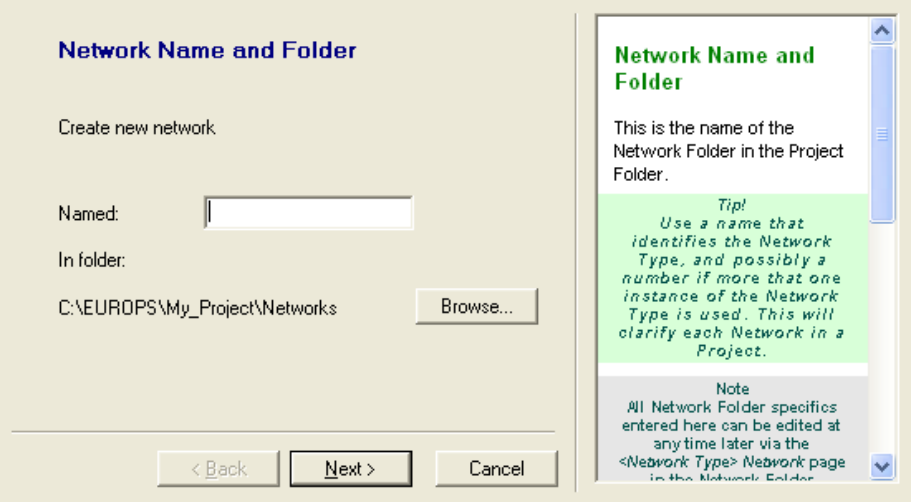
If there are Field Tags attached to Block Tags, deleting the Block and building the Instrument will result in the disconnection of all Field Tags from that Block as the Block no longer exists.

7 CREATE MODBUS / PROFIBUS NETWORK FOLDERS

The MODBUS or PROFIBUS Network folders are created to store all the files and subfolders related to each network in the Project and to control the Online Monitoring and Download operations.

1. Assuming that Project Organiser has remained open, select the Instrument to which the MODBUS or PROFIBUS Network is connected.
2. Create a MODBUS or PROFIBUS Network folder by launching the New Network wizard (File > New Network).

   Each MODBUS or PROFIBUS network corresponds to a physical network in the system.



3. This initiates the New Network Wizard. After an appropriate Network name has been entered, it offers the choice of Network Types:

Network type	Description
MODBUS	Supports communications between T800/ T940 instruments and the 2500I/O system with single Wonderware InTouch Operations viewer.
PROFIBUS	PROFIBUS supports communications between T800 or T940 Instruments and the 2500 I/O system.

4. Follow the instructions shown on each page of the wizard.
5. Click on the ‘Finish’ button to launch the Build process. This may take a while to create the Network Type folder.

7.1 ONLINE MONITORING AND DOWNLOAD USING NETWORK FOLDERS

The Properties of each MODBUS or PROFIBUS Network folder allow the selection and configuration of an iTools OPC port that can be used to download and monitor a 2500 configuration.

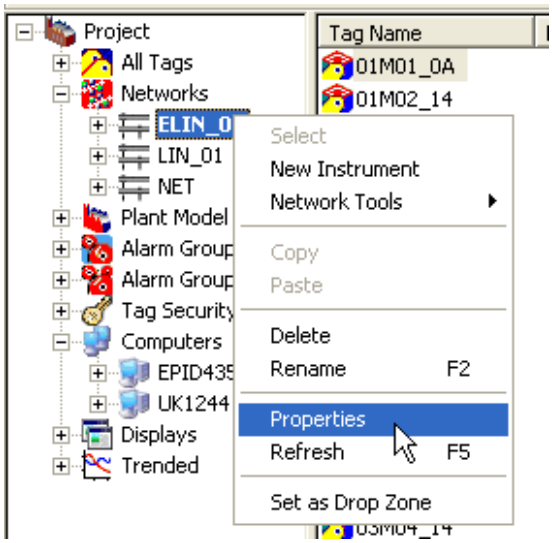
This setting is required only if Downloading and Monitoring of instruments in this Network folder is to be allowed from the context menu and File menu of each instrument.

If this is not configured, the context menu and File menu for the 2500 Instrument folders will have the Download, and Monitor options disabled (greyed out). These operations can still be carried out using the iTools Engineering Studio, but in this case the user must know which files are needed for the relevant instruments.

Note: After the creation or deletion of a Network folder, a Build operation is carried out automatically from Project Organiser in order to update the Project database.

7.1.1 Changing an iTools OPC port

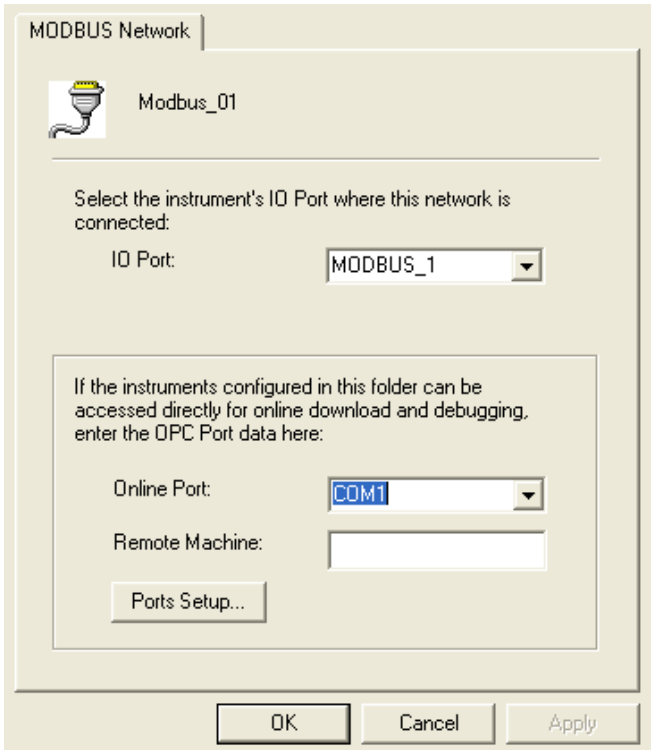
1. Select the **MODBUS** or **PROFIBUS** Network folder icon to reveal the context menu.
2. Select Properties. This shows the MODBUS Network or PROFIBUS Network tab



3. Change the Online Port and Remote Machine fields if required.

   The Ports Setup button can be used to Add, Edit or Delete Port Names.
4. Close the Properties window.

Note: A Build operation is not required when only the Properties of the Network folder are being edited.



8 CREATE 2500 INSTRUMENT FOLDERS

The 2500 Instrument folders store all the 2500 Instrument Clone configuration files related to this Instrument in the Network, including the control options for Online Monitoring and Download operations. If the Network folder containing the instruments has not been configured for this purpose the options are unavailable (greyed out).

The Instrument folder 'Properties' indicate the type, version and address of the instrument, and which .uic name was requested. It does not show what was configured.

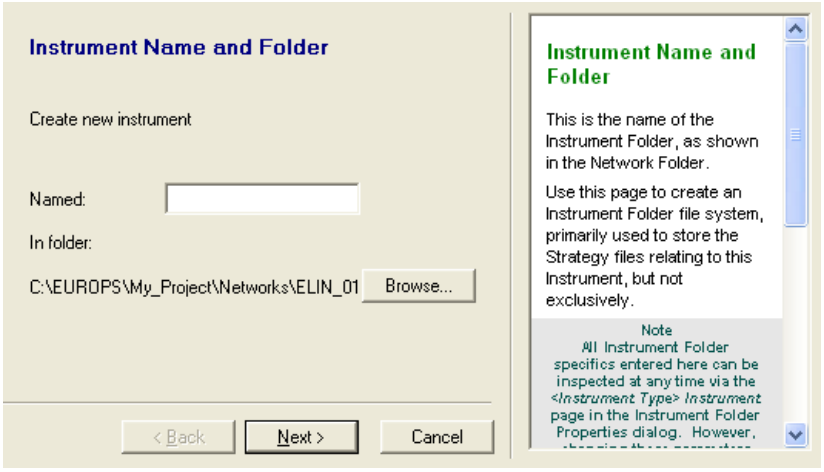
Only one of the following Instrument Versions should be needed:
2500 (2 Loop 2500)
2580 (8 Loop 2500)
25F0 (SYSIO – Fast IOC. No Loops or Toolkit)

> Note: The T800 has a default Profibus address of 1. The T940 uses default Profibus addresses 2 for the primary processor and 1 for the secondary (if installed). Ensure that addresses on the communications line are not duplicated. T800 addresses are configured in the Comms Setup screen and the T940 in its _SYSTEM.OPT file.
> For Modbus communications, the T940 address (if configured as Modbus Master) MUST always be zero.
> Refer to the T94 Process Supervisor and/or the T800 Visual supervisor handbooks, as required.

1. Assuming that Project Organiser has remained open, expand the LIN Network folder, and the LIN Instrument folder.
2. Open the I/O Network folder.
3. Create a I/O Instrument folder by launching the New Instrument wizard (File > New Instrument).

   Alternatively, the folder can be launched by pressing  .

   Each Instrument corresponds to a physical instrument on the associated network.



4. This initiates the New Instrument Wizard. After an appropriate Instrument name has been entered, it offers the choice of hardware parameters, i.e. type, and version, and Strategy parameters.

> Note: It is recommended that an <Instrument Type>_<Modbus/Profibus Address> convention (e.g. 2500_03) be used to simplify instrument identification.

5. Follow the instructions shown on each page of the wizard.
6. Press the 'Finish' button to launch the Build process. It may take a while to create the Instrument folder.

> Notes…
> 1. See 'Create T800/T940 I/O Block' if Modbus or Profibus Network folders are to be moved or deleted.
> 2. After an Instrument folder has been created or deleted, a Build operation is initiated automatically from Project Organiser to update the Project database. A Full Project Build must be used if Operations Servers are used in the Project (Project > Full Project Build).

8.1 CHANGING THE PROPERTIES OF 2500 INSTRUMENTS

The 2500 Instrument name is changed by replacing the icon name.

The address is changed by amending the Slave Address field in the Properties dialogue and performing a Build. Changes to the type and/or to the version reference require a corresponding change using iTools and the Updating a 2500 Instrument Version instructions below.

> Note: See 'Create T800/T940 I/O Block' if Modbus or Profibus Network folders are to be moved or deleted.

8.1.1 Changing a 2500 Instrument folder name

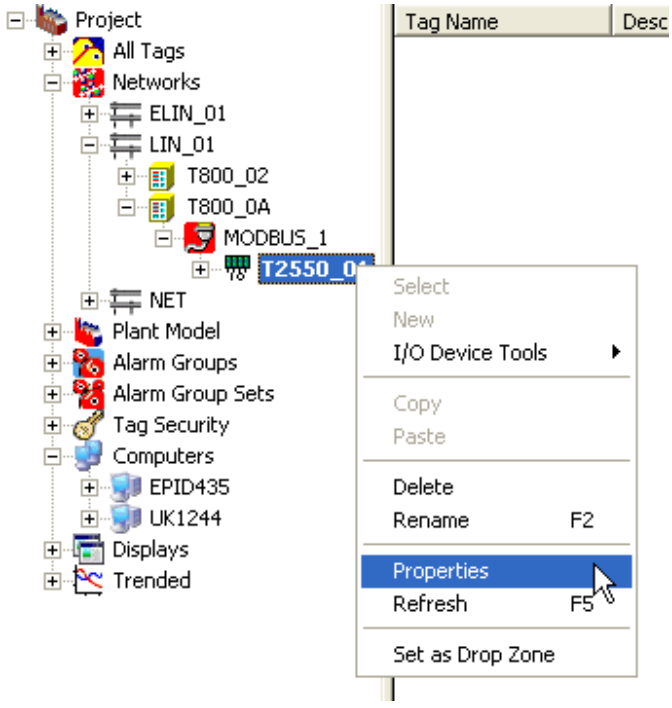
A 2500 Instrument folder name can be changed by replacing the icon name. The following build process recognises that the Instrument name has changed and continues, but any instrument folders that have been changed to an already existing Instrument folder name will be ignored.

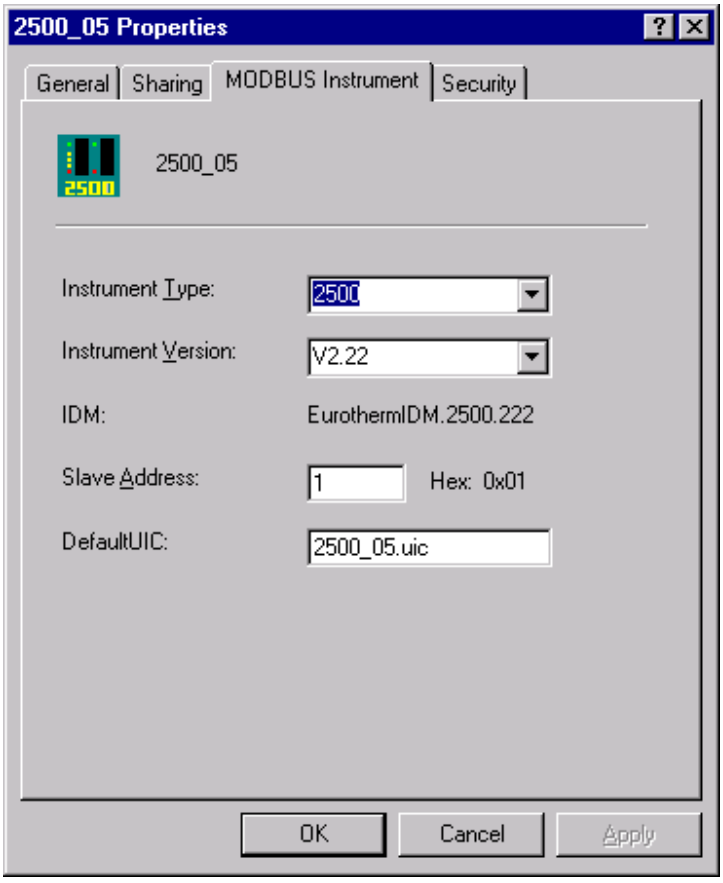
By offsetting the folder names, the build will process a folder that it can build. This leaves the original folder name free. Repeat builds will subsequently Build the instrument folders as required. If two instrument folder names must be swapped, an unused name must first be assigned to one Instrument folder so that the build is able to process at least one of the Instrument folders.

8.1.2 Changing an Instrument address

This ensures that the Instrument Type and Version match the actual Clone File.

1. Select the I/O Instrument icon.
2. Select Properties. This shows the I/O Instrument tab.
3. Click Modbus or Profibus Instrument tab.
4. Edit the appropriate fields as required.





5. Close the Properties window.

8.1.3 Updating a 2500 Instrument Version

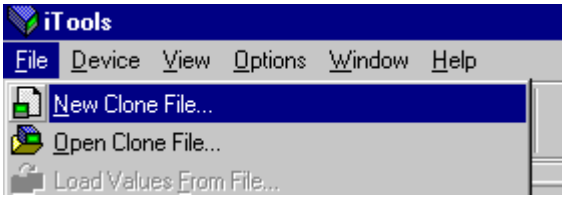
1. Assuming that Project Organiser has remained open, expand the LIN Network folder, the LIN Instrument folder and select the I/O Instrument required.

2. Launch iTools Engineering Studio by pressing the relevant icon,  , in the Application toolbar.

Start > … > iTools Engineering Studio, where '…' denotes the installation path.

3. Create a New Clone File that will replace the current Clone File by selecting: File > New Clone file.

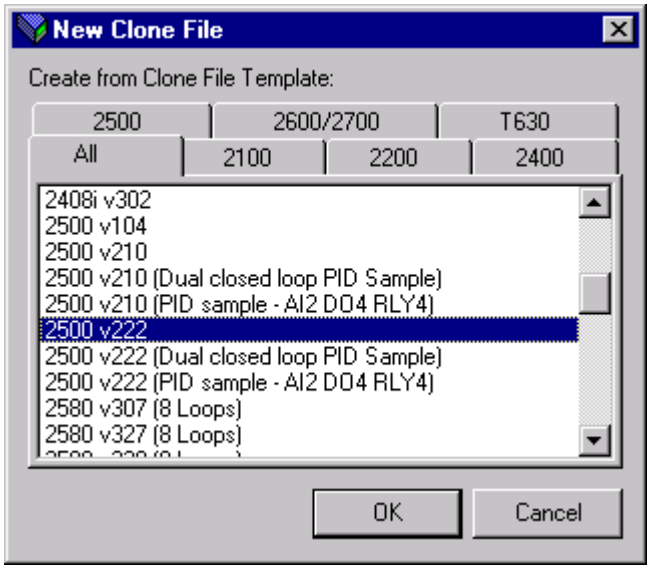
   This opens the New Clone file dialog box.



4. Click the Instrument Type template tab corresponding to the Template required

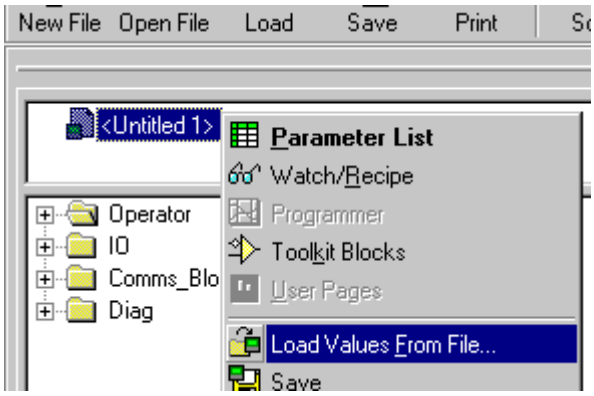
5. Locate and select the Instrument Clone file Version required.

6. Press OK to confirm selection.

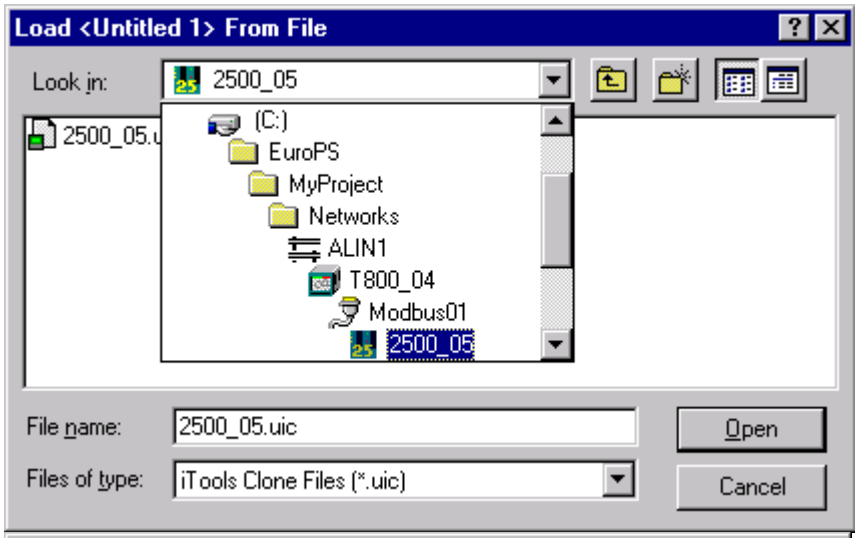


7. Select File > Load Values from File from the 'Untitled' Clone File that appears in the iTools window.

   This opens the browse dialogue box.



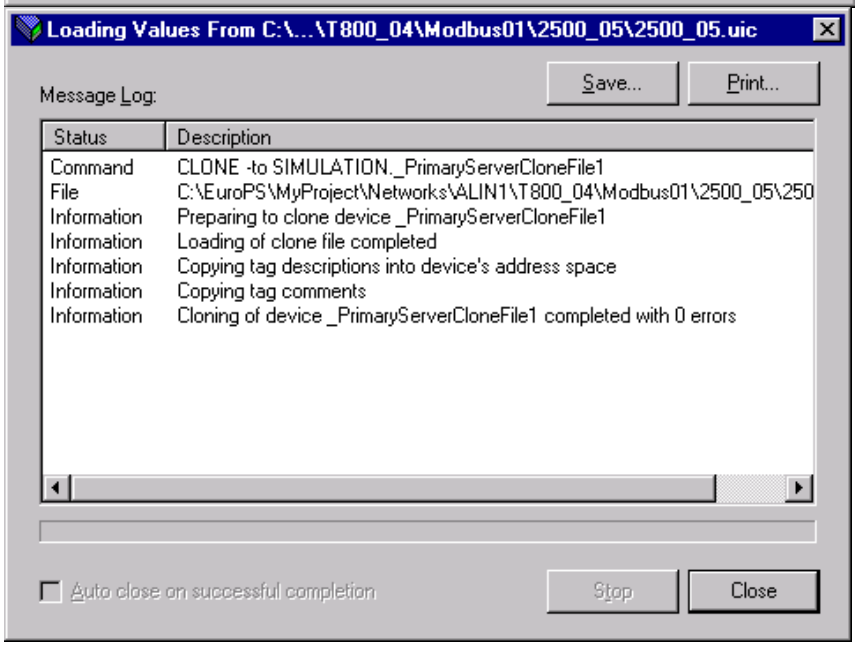
8. Locate and open the Clone file containing the correct information.



9. Close the Message Log dialogue box that opens.

   Once loaded, Clone File will have been upgraded.

10. Use File > Save, to save the New Clone File.



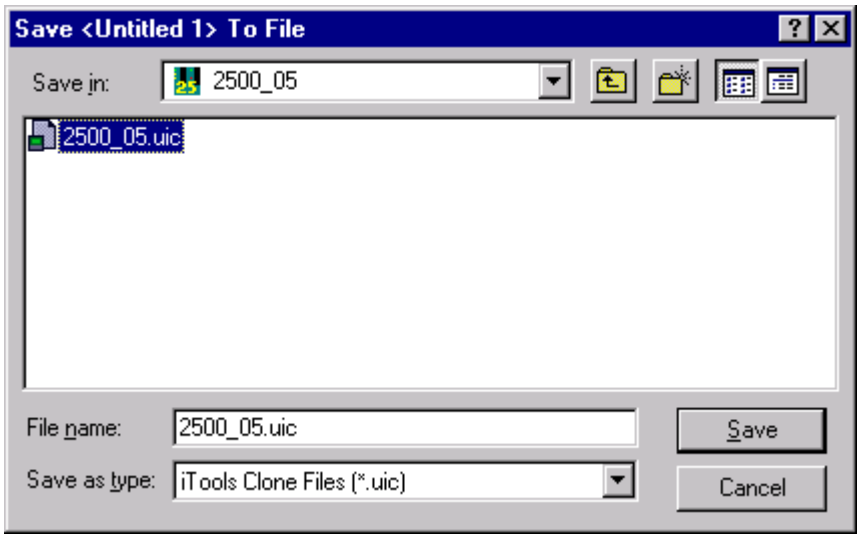
11. Select the Clone File to be replaced, or enter the name of the Clone File in the File name field.

12. Press 'Save' to overwrite the original Clone File
    Ensure the 2500 Instrument folder properties (Type and Version) match the actual Clone File.

    Note: (See Changing an Instrument address, type and/or version reference).

13. Select 'Yes' at the confirmation window that appears.

14. Close iTools.



9 CONFIGURING 2500 CLONE FILES

Clone files have a '.uic' extension and are configured using iTools Engineering Studio.

Start > All Programs > ... > iTools Engineering Studio, where '...' denotes the installation path.

Set the following configuration options in each clone file: -

Operator.Comms.Baud Modbus Baud Rate – This must match the Modbus baud rate configured in the T800 or T940.

Operator.System.LveCnf Live Config Mode – This should be enabled to allow online changes to parameters, e.g. ranges, invert, alarm limits.

Operator.System.IONwdg Network Watchdog Timeout – This should be set to 1 second which indicates the period before the 2500 takes action if the Modbus/Profibus comms fails.

Operator.System.NwdAct Network Failure Action – This should be set to Stby (Standby) indicating the action the 2500 should take once the Network Watchdog Timeout has expired

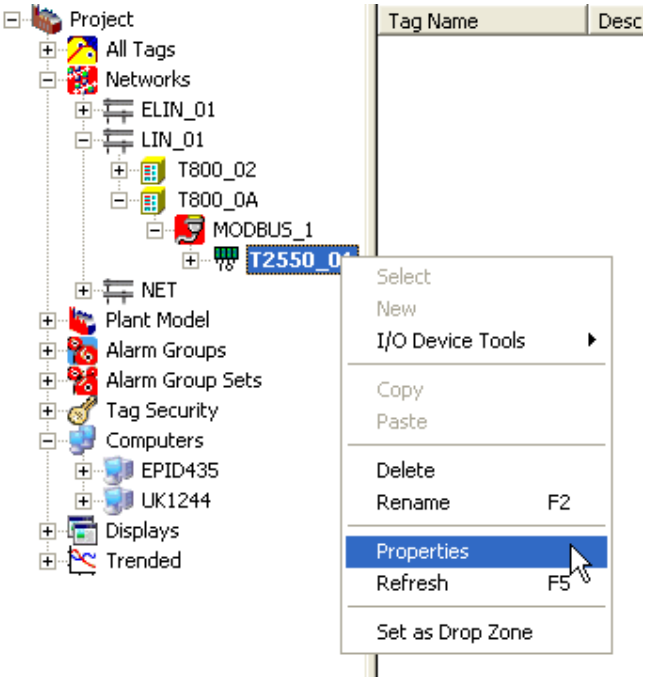
Operator.System.IONrec Network Watchdog Recovery Time – This should be set to 1 second which indicates the period before the 2500 takes action if the Modbus/Profibus comms recovers

Analogue Alarms in iTools, map onto the LIN D25_AI Blocks as follows:
ModuleXX.MODXX.ALMXXA.ALSP_1 = Hi Alarm Limit for Channel 1
ModuleXX.MODXX.ALMXXA.ALSP_3 = Lo Alarm Limit for Channel 1
ModuleXX.MODXX.ALMXXA.ALSP_2 = Hi Alarm Limit for Channel 2
ModuleXX.MODXX.ALMXXA.ALSP_4 = Lo Alarm Limit for Channel 2
ModuleXX.MODXX.ALMXXA.ALSP_5 = Hi Alarm Limit for Channel 3
ModuleXX.MODXX.ALMXXA.ALSP_7 = Lo Alarm Limit for Channel 3
ModuleXX.MODXX.ALMXXA.ALSP_6 = Hi Alarm Limit for Channel 4
ModuleXX.MODXX.ALMXXA.ALSP_8 = Lo Alarm Limit for Channel 4

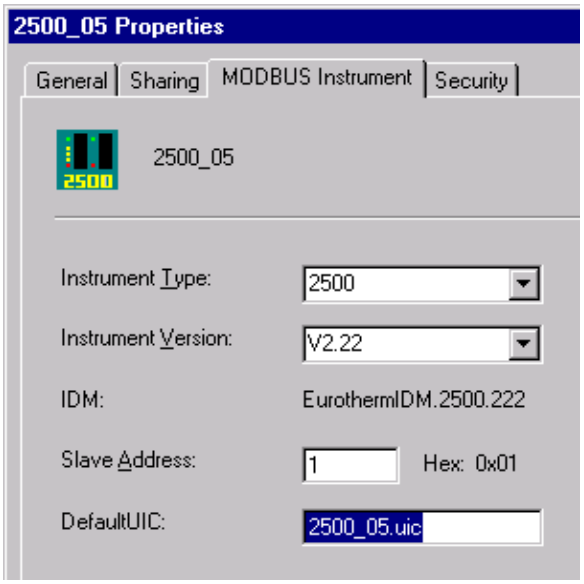
9.1 CHANGING CLONE FILES

9.1.1 Changing a 2500 Clone File name

1. Select the 2500 clone file and replace the file name.
2. Select the 2500 Instrument folder icon.
3. Select Properties.



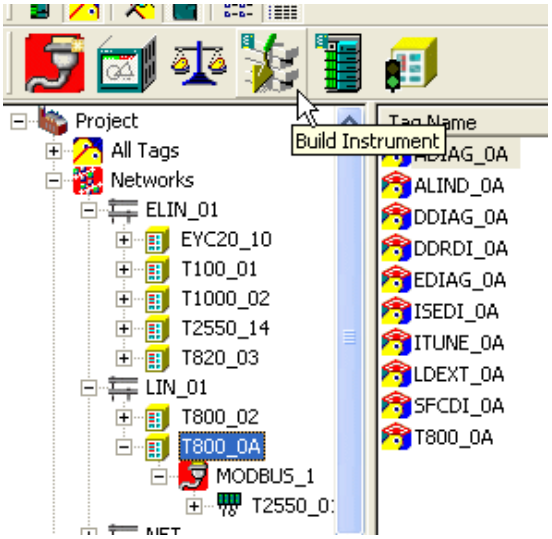
4. Click the Modbus or Profibus Instrument tab.
5. Find the DefaultUIC field and change it to match the 2500 Clone File name.
6. Close the Properties window.



UPDATE THE PROJECT DATABASE

1. Select the LIN Instrument folder icon.

   This is the Instrument containing the new Modbus or Profibus Instrument.
2. Build the LIN Instrument folder using the Build button on the Application toolbar so that the Project database is updated with the new Properties.

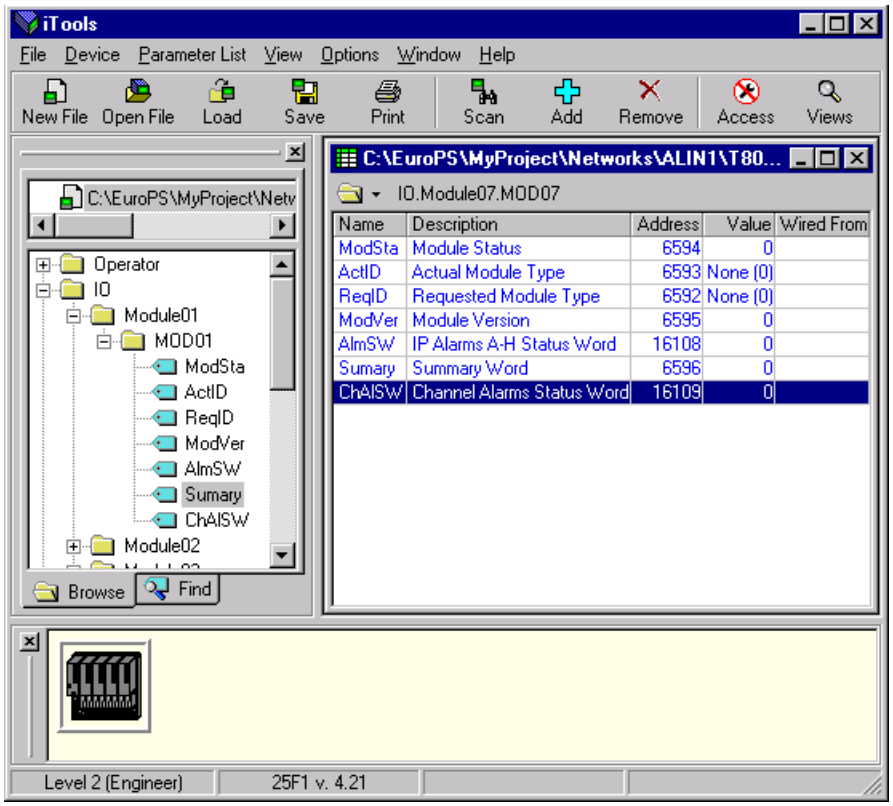


CHANGING A 2500 CLONE I/O MODULE LAYOUT

Note: Refer to iTools Help for more details.

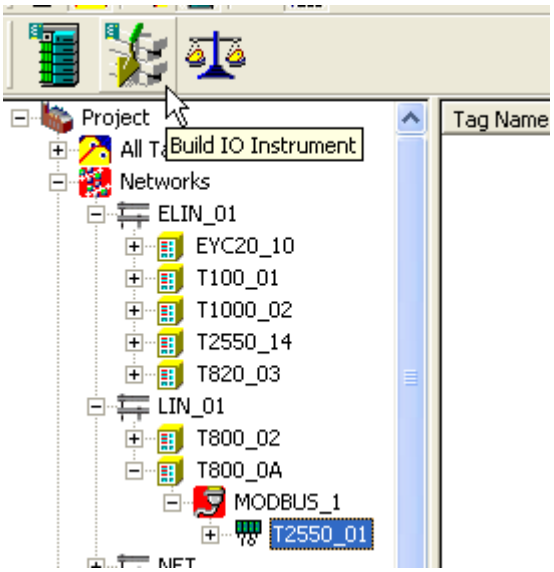
1. Open the Instrument folder.
2. Open the Clone file. (This opens iTools.)
3. Edit the Clone file as required.
4. Save the changes and exit iTools.
   To ensure changes are accessible to the Project, identical changes MUST be made in the IO Manager.

   Note: See 'Create T800/T940 I/0 Blocks' section.



5. Build the Modbus or Profibus Instrument folder using the Build button on the Application toolbar so that any mismatches between the Clone File and the IO Manager are indicated for correction.

   Note: To update the Project database, a Build operation is done automatically from Project Organiser after an instrument folder has been created or deleted.
   A Full Project Build must be used if Operations Servers are used in the Project (Project > Full Project Build).

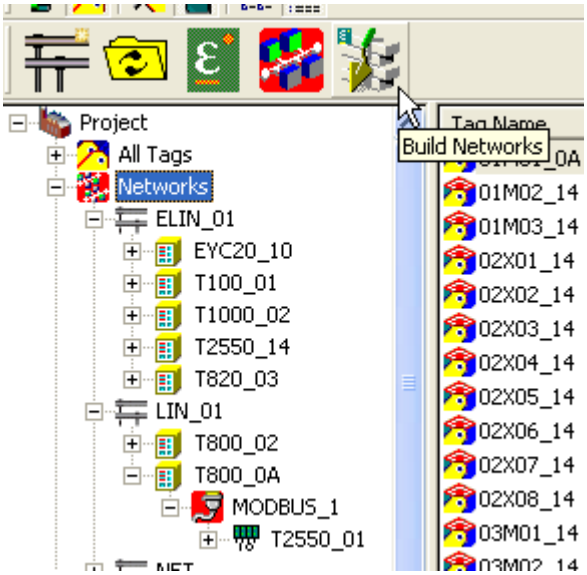


10 BUILDING THE NETWORKS FOLDER

The Networks folder is created to store all the files and subfolders related to each instrument in each network in the Project. The Build process takes the information configured in all the folders under the Networks folder and automatically enters it into the Project database. This is used by the project tools available in Project Organiser and utilities.

Note: It is necessary to Build from the Project folder to the Instrument. For example. it is not possible to Build a 2500 Instrument until the Network folder containing it has first been built, and so on.

1. Assuming that Project Organiser has remained open, select the Networks folder icon.
2. Build the Networks folder using the Build button on the Application toolbar.



Notes:

1. To update the Project database, a Build operation is done automatically from Project Organiser after an instrument folder has been created or deleted.
A Full Project Build must be used if Operations Servers are used in the Project (Project > Full Project Build).
2. Building Networks or Instruments may be time consuming if there are lots of I/O Instruments and no changes have been made to them. The BuildLcl Utility (available on the Installation CD) allows the user to build a LIN Instrument folder without building all the I/O Instruments it contains. The utility is to be found in the folder <CD>:\Non Installs\Utilities\BuildLcl. The 'readme.txt' file that accompanies it should be referred to before the utility is used.

11 IMPORTING TAGS (TAG IMPORT/EXPORT)

The Tag Import/Export Utility provides access to general Tag information for ALL Tags. It allows you to import or export Tags via .csv/.txt format file to and from the Project database. Changing the format makes the editing of the Tags data easier.

11.1 EXPORTING ALL TAGS TO A .csv/.txt FORMAT

Note: This is also appropriate for producing pro-forma file formats.

1. Assuming that Project Organiser has remained open, select the All Tags icon.
2. Launch Tag Import/Export utility by pressing the relevant icon,  , in the Application toolbar.
3. Select 'Export Tags'.
4. Select the required Export type.

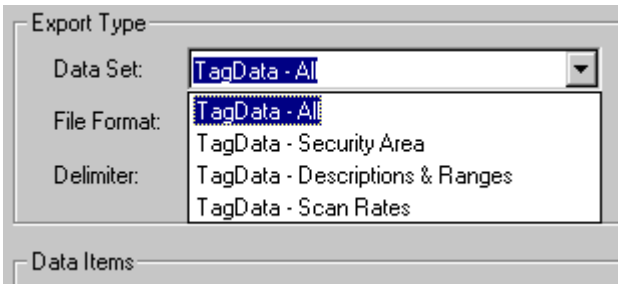
DATA SET

TagData - All — Lists all data items available for exporting.

TagData - Security Areas — Includes Security Area data items.

TagData - Description & Ranges — Includes FullDesc, BriefDesc and Ranges data items and displays selectable data items for exporting

TagData - Scan Rates — Selects the Scan Rate data items for exporting.

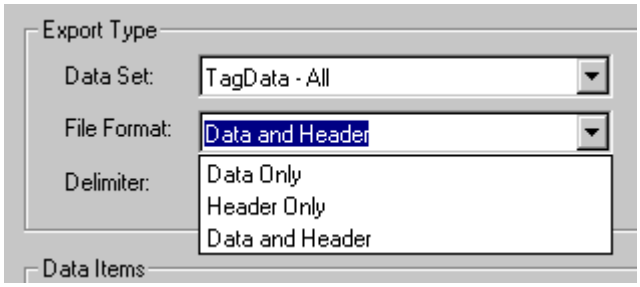


FILE FORMAT

Data Only — Exports all included data items excluding Header data.

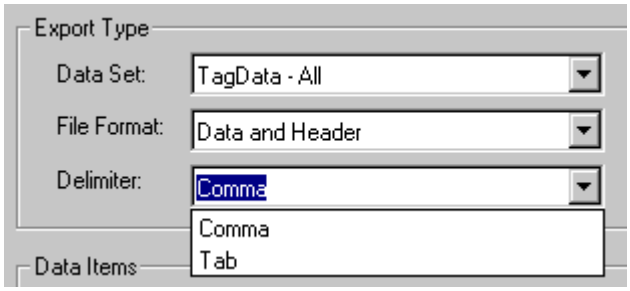
Header Only — Exports all included data items' Header data ONLY and is used to create pro-forma file formats. This includes Utility version, Project database location, Date and Time of creation, and Description of the information displayed in the exported file.

Data and Header — Exports a combination of Data and Header information.



DELIMITER

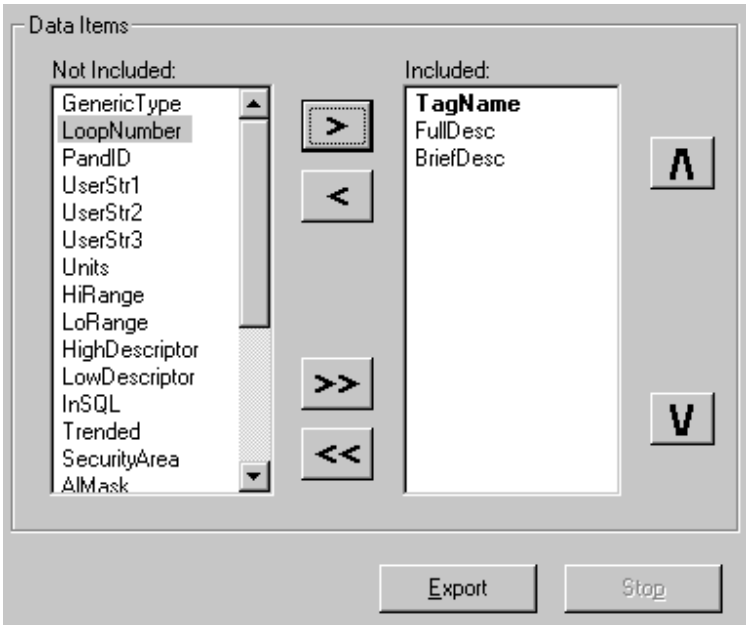
Comma,	Exports information as a .csv (Comma) format file opened primarily using Excel.
Tab	Exports information as .txt (Tab) format file opened primarily using Notepad.



5. In the 'Not Included:' column, select the data items to be exported.

6. Press > to move the selected data items to the 'Included:' column.

   Tagname is always included. All other data items are selectable depending on the Data Set (TagData – All) configuration above.



   > Add to Included column.

   < Return to Not Included column.

   >> Add ALL to Included column.

   << Return ALL to Not Included column.

   Λ Move data item up in the order.

   V Move data item down in the order.

7. Click on the 'Export' button to convert to the format specified in the Delimiter field.

EDIT EXPORTED FILE

1. Open the file using Notepad, Excel or Access (whichever is relevant to the file).
2. Add customer information into the corresponding columns.
3. Save the file as a .txt (Tab) or .csv (Comma) file.

11.1.1 Importing Tags from a .csv/.txt format

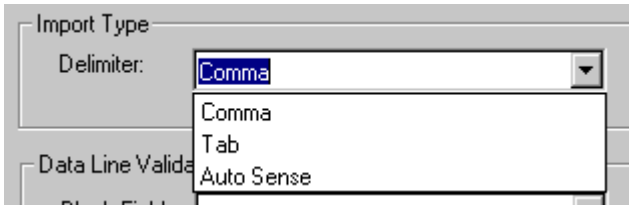
This application is of use when a list of LIN or I/O Tags and the configured parameters, e.g. Tagnames, already exist as a .csv or .txt file. Once imported the I/O tags can be used in I/O Manager to create the blocks required automatically.

1. Assuming that Project Organiser has remained open, select the **All Tags** icon.
2. Launch Tag Import/Export utility by pressing the relevant icon,  , in the Application toolbar.
3. Select 'Import'.

4. Select the Import Type.

DELIMITER

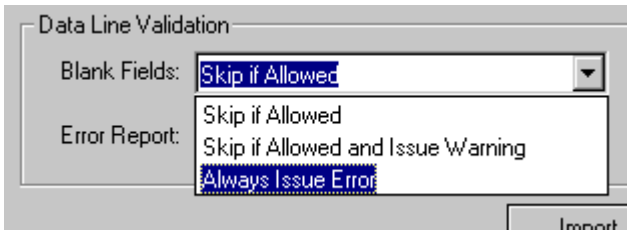
Select the file format type .csv (Comma) or .txt (Tab) from the drop down. Auto Sense detects the file format for you.



5. Select the Data Line Validation.

BLANK FIELDS

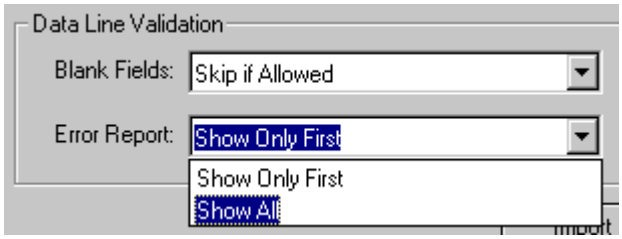
Skip if Allowed: Ignores any fields without data.
Skip if Allowed and Issue Warning:
Displays a warning for any fields without data that have been ignored.
Always Issue Error:
Displays warnings whenever an error arises.



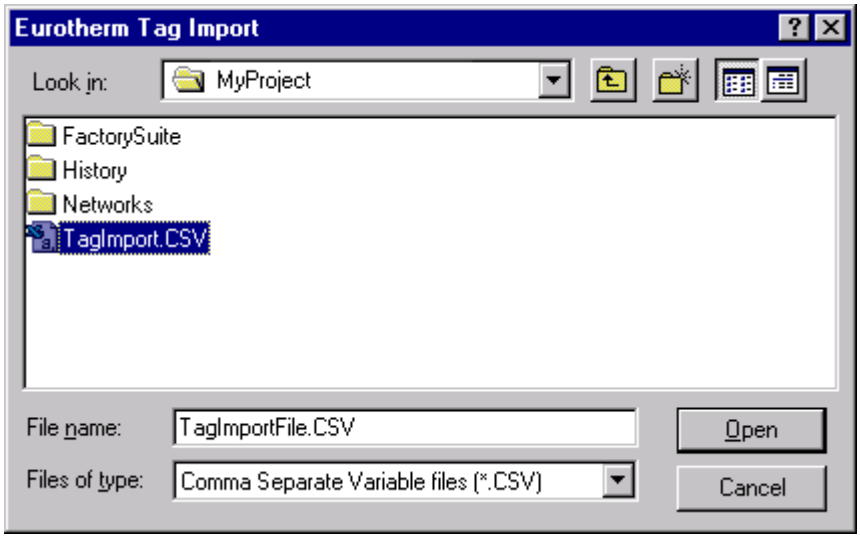
ERROR REPORT

Show Only First: Displays only the initial error as the user is aware that there is more data missing.

Show All: Displays all errors to indicate where data is missing.



6. Click on the 'Import' button. A Browse dialogue window opens.
7. Find the file containing the relevant Tags.
8. Click on the 'Open' button.



> Note: Ensure that all file errors that the import encounters are resolved.

12 CREATING T800/T940 I/O BLOCKS

The IO Manager creates I/O Blocks (D25_AI, D25_AO, D25_DI and D25_DO) in the T800/T940 unit that is connected to the selected 2500 Instrument, or I/O Blocks (MOD_UIO, AI_UIO, AO_UIO, DI_UIO, DO_UIO and FI2_UIO) in the T2550/T2750 in the Networks folder.

> Note: LINtools Engineering Studio can also be used to configure the I/O of the T2550, T2750, or 2500 LIN Instrument.

By default, the IO Manager displays empty slots. I/O Modules must be assigned to each slot according to how the clone file is to be configured. If a clone file has already been created and a Build operation of the Instrument has been performed, the IO Manager will automatically have been populated with the same Module Types. Assigning a Tag to a channel causes a corresponding LIN Block to be created in the LIN database of the LIN Instrument that is connected to the selected Instrument in the Networks folder.

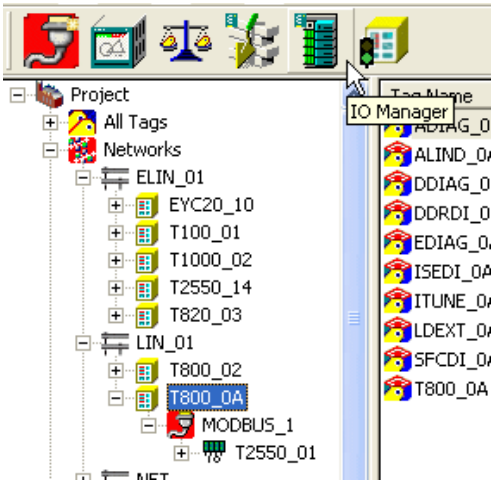
Once I/O Modules have been allocated, further changes in this Editor or the 2500 clone file will result in warnings during the Build operation to indicate each mismatch.

> Notes:
> 1. Ensure that the clone file information is identical for both the T800/T940 and the 2500.
> 2. If the 2500 Instrument folder or the corresponding Network folder is deleted, or if the 2500 Instrument folder is moved to another instrument folder using Windows Explorer, All the 2500 Instrument IO Manager configurations are lost. This includes all the LIN Block field values configured using the TagEdit and Mass Edit Editors.
> 3. This utility is linked to the TagEdit Utility which enables the editing of Tags.

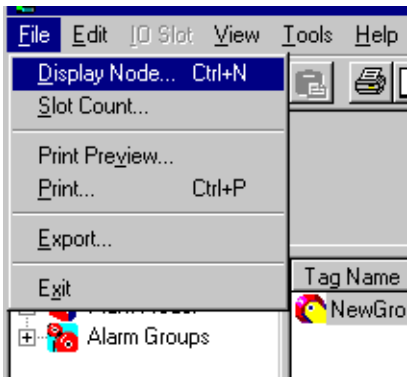
12.1 USING THE I/O MANAGER

> Note: These instructions also apply to the T2550 and T2750.

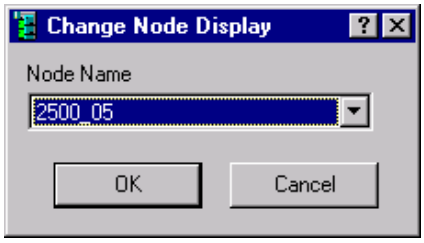
1. Assuming that Project Organiser has remained open, select any instrument connected to an I/O Instrument Network.
2. Launch **IO Manager** utility by pressing the relevant icon,  , in the Application toolbar.



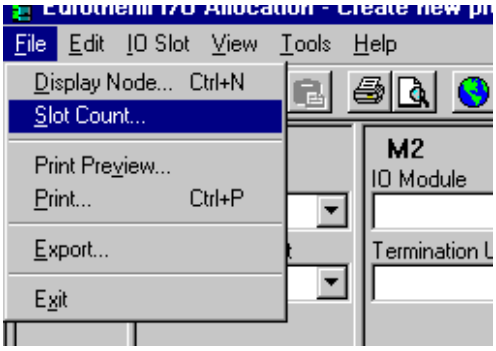
3. Open a Display Node (File > Display Node)



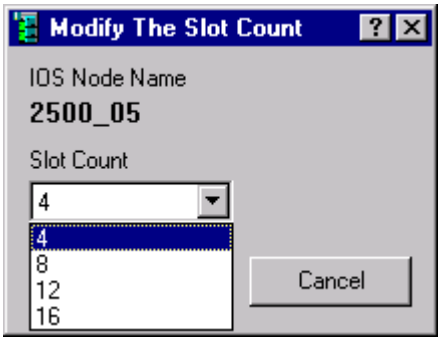
4. Select the Node (Instrument) Name you require.
5. Press OK to confirm and open.



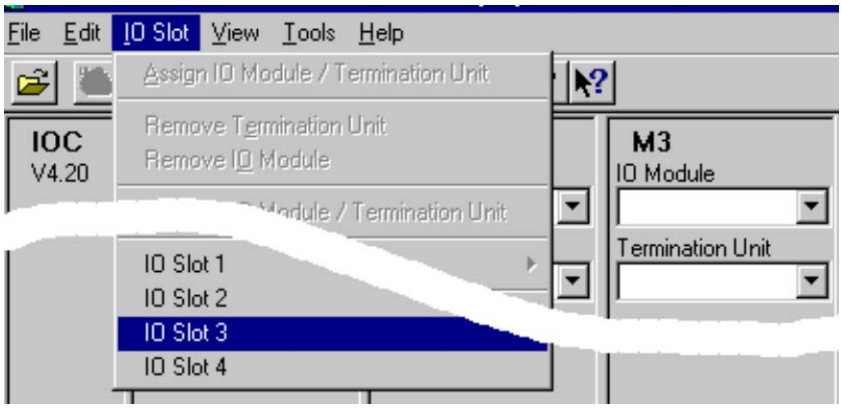
6. Change the Slot Count (if required) (File > Slot Count).



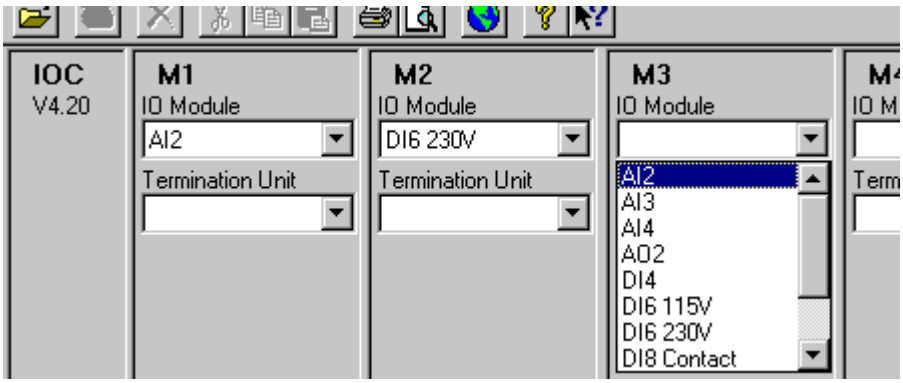
7. Select the number of I/O required and press 'OK' to confirm and display.



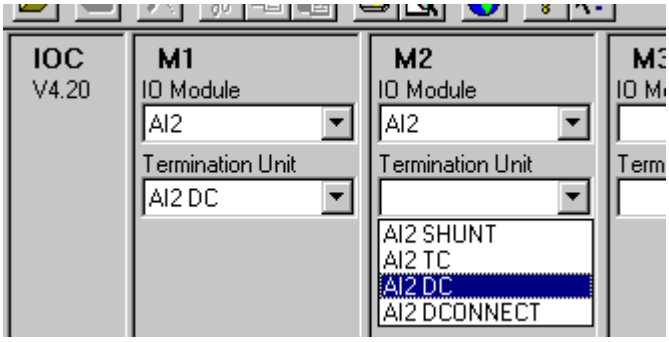
8. Select the Slot to be edited (IO Slot > IO Slot n). The drop down displays the commands applicable to the selected Slot.



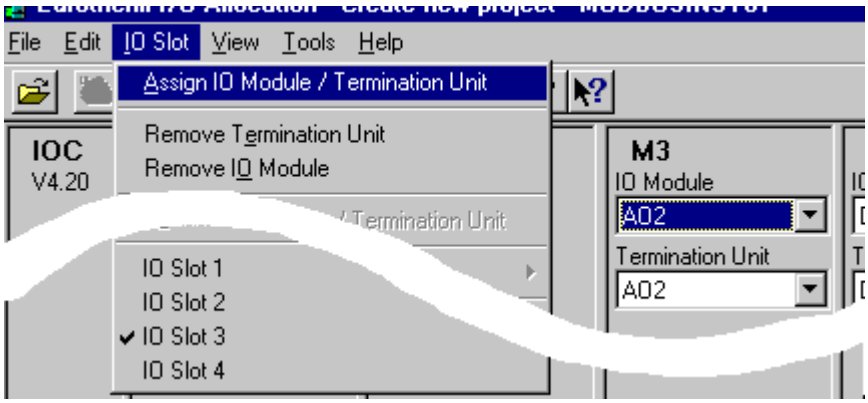
9. Pick **IO module** from drop down.



10. Pick Termination Unit from drop down.

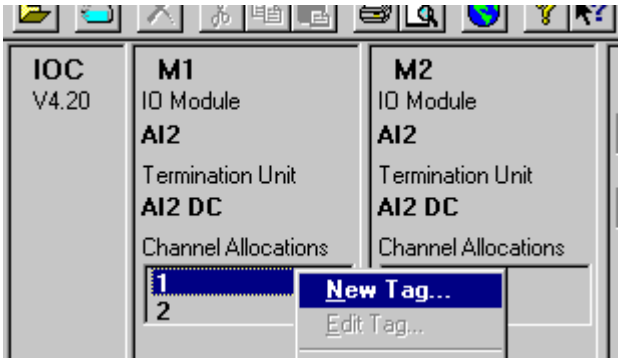


11. Assign IO module and Termination Unit (IO Slot > Assign IO Module / Termination Unit)



12. Create Tags for IO Module Slot Channels.

    Alternatively use the Tag Browser Utility to drag Tags into the appropriate Slot Channel.

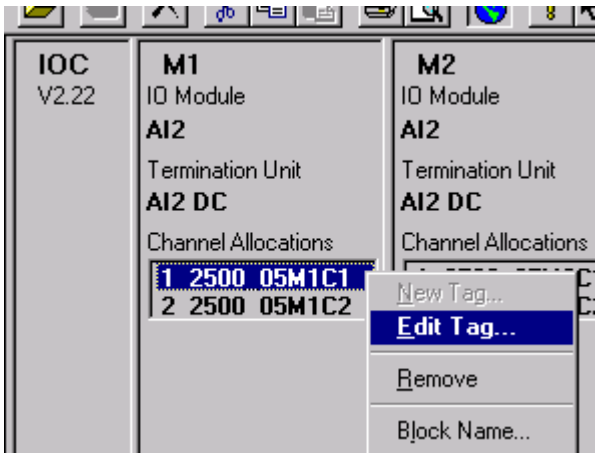


13. Name the New Tag.

12.1.1 Editing Instrument IO Module Channel Tags

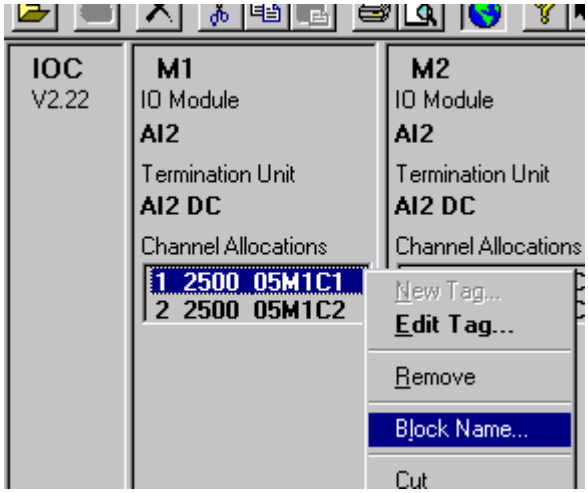
1. Select the Channel Allocations Tag.
2. Edit the Tag. This opens the TagEdit Utility (IO Slot > Channel > Edit Tag)

   Note: Refer to the TagEdit section.
3. Edit fields as appropriate.
4. Close to accept the changes to the Channel Tag and exit the TagEdit Utility.

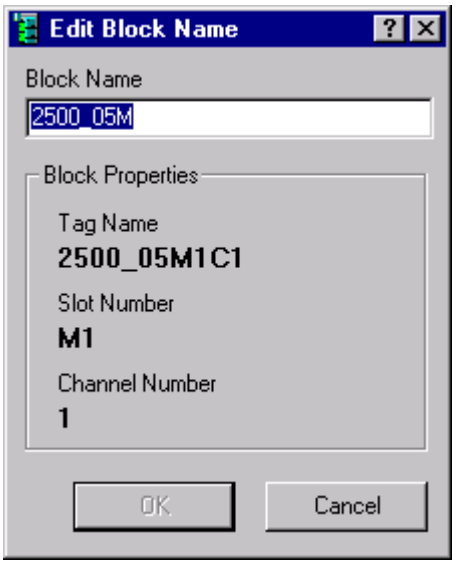


12.1.2 Amending Instrument IO Module Channel Block Name

1. Select the Channel Allocations Tag.
2. Select Block Name (IO Slot > Channel > Block Name)



3. Amend the unique eight-character Block Name as appropriate.
4. Click **OK** to accept the changes.
5. Close IO Manager.



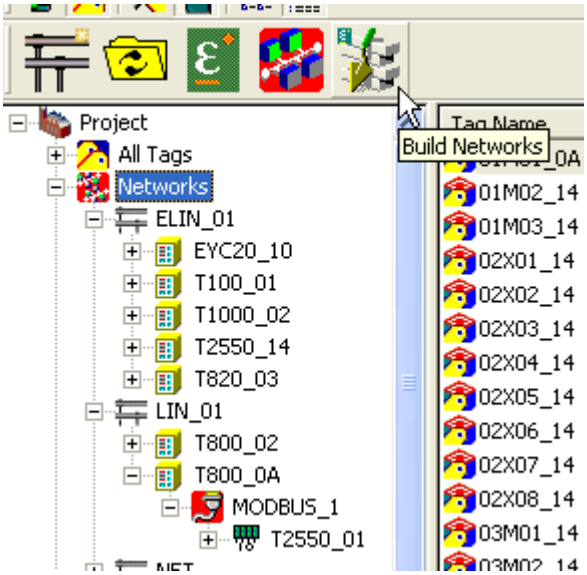
12.2 ASSIGNING I/O TAGS TO A T2550 OR A T2750

When a T2550 or T2750 instrument has been opened in IO Manager, Tags that appear in the Tag view can be assigned to the appropriate I/O Module simply by dragging the Tag to the I/O Module shown in the Tree view of Project Organiser, and dropping it.

12.2.1 Update the Project database

Notes: To update the Project database, a Build operation is done automatically from Project Organiser after an instrument folder has been created or deleted.
A Full Project Build must be used if Operations Servers are used in the Project (Project > Full Project Build).

1. Select the LIN Network folder icon. This is the Network containing the new Modbus or Profibus Instrument.
2. Build the LIN Network folder so that the I/O Blocks are created in the LIN Instrument.



13 CONFIGURING THE PLANT MODEL

The Plant Model allows Process Cell and Plant Unit structures to be created, and Tags assigned. Control Modules (PID, Valves and Motors) can also be created and configured, but these have very simple structures and do not include failure modes or other interlocks which must be added in LINtools Engineering Studio. Plant Units are also used to create LINtools Engineering Studio Monitor files for I/O Blocks allocated in the IO Manager.

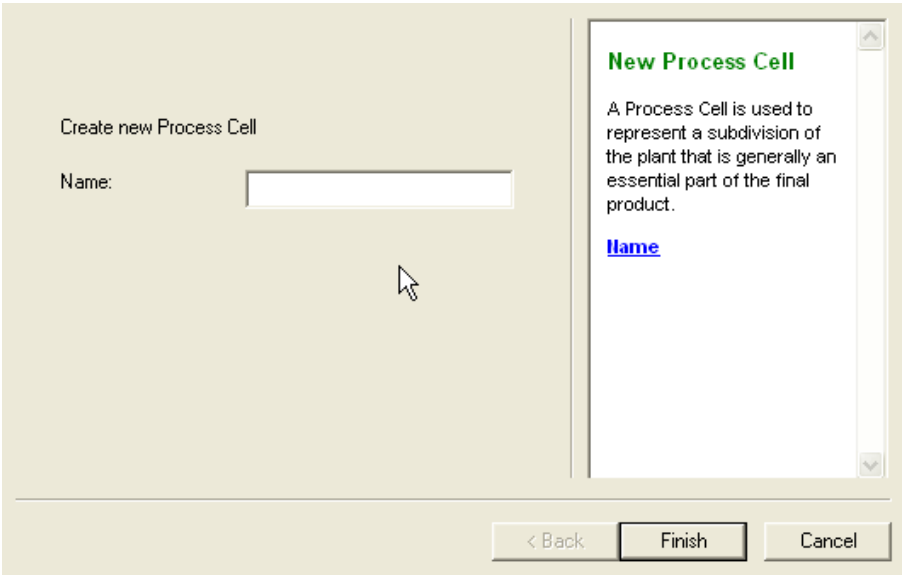
> Note: It is recommended that LINtools Engineering Studio be used to create, configure or edit Control Modules.

13.1 CREATING A PROCESS CELL

1. Assuming that Project Organiser has remained open, select the Plant Model folder.
2. Create a Process Cell folder by launching the New Process Cell wizard (File > New Process Cell).

   Alternatively, the folder can be launched by clicking on  .

   Each Process Cell corresponds to a physical subdivision in the plant/system.



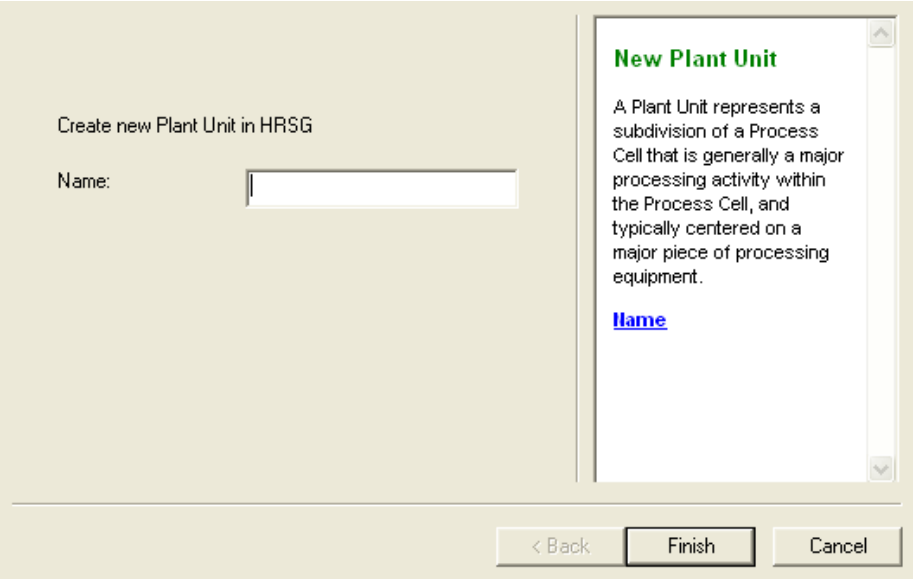
3. The New Process Cell Wizard starts. Follow the instructions shown on each page of the wizard.
4. Click on the 'Finish' button.

> Notes:
>
> 1. 'Finish' does not automatically launch the Build process.
>
> 2. Always Build from the Project folder down to the I/O Instrument Folder, or use the Full Project Build in Project Organiser (Project > Full Project Build). Refer to the Project Organiser Help File for full instructions.

13.2 CONFIGURE A PROCESS CELL

The Name and Description parameters of each Process Cell can be edited, by selecting the Properties command from the context menu to show the Properties dialog.

13.3 CREATE A PLANT UNIT



1. Assuming that Project Organiser has remained open, select the Plant Model folder and expand the appropriate Process Cell.
2. Create a Plant Unit folder by launching the New Plant Unit wizard (File > New Plant Unit).

   Alternatively, the folder can be launched by clicking on  .

   Each Plant Unit generally corresponds to a major processing activity, centred on a major piece of processing equipment in the plant/system.
3. The New Process Cell Wizard starts. Follow the instructions shown on each page of the wizard.
4. Click on the 'Finish' button.

> Notes:
>
> 1. 'Finish' does not automatically launch the Build process.
>
> 2. Always Build from the Project folder down to the I/O Instrument Folder, or use the Full Project Build in Project Organiser (Project > Full Project Build). Refer to the Project Organiser Help File for full instructions.

13.4 CONFIGURE A PLANT UNIT

The Name and Description parameters of each Plant Unit can be edited, by selecting the Properties command from the context menu to show the Properties dialog.

13.4.1 Assigning Tags

It is important to create Process Cells and Plant Units because it offers better organisation of the Tags in the Project. When both the instrument and the Plant Unit have been created, Tags in the instrument folder can be assigned to a Plant Unit. Any Tag that appears in the Tag view can be assigned to the appropriate Plant Unit simply by dragging the Tag to the Plant Unit shown in the Tree view of Project Organiser, and dropping it.

> Note: Any Tag assigned to a Plant Unit will be included in all instances. For example, if adding PT5-7 to the TEG_Inlet_Valve Plant Unit, the Tag will also be assigned to the Alarm Group containing the TEG_Inlet_Valve Plant Unit.

14 CONFIGURING ALARM GROUPS AND ALARM GROUP SETS

This allows Alarm Groups to be created and individual Tags and groups of Tags already in Plant Units to be assigned, for reporting alarms in the Supervisory Computer during run time.

The Alarm Group Sets allow the user to assign groups of Tags already in Alarm Groups that may also already contain Plant Units, for reporting alarms in the Supervisory Computer during run time.

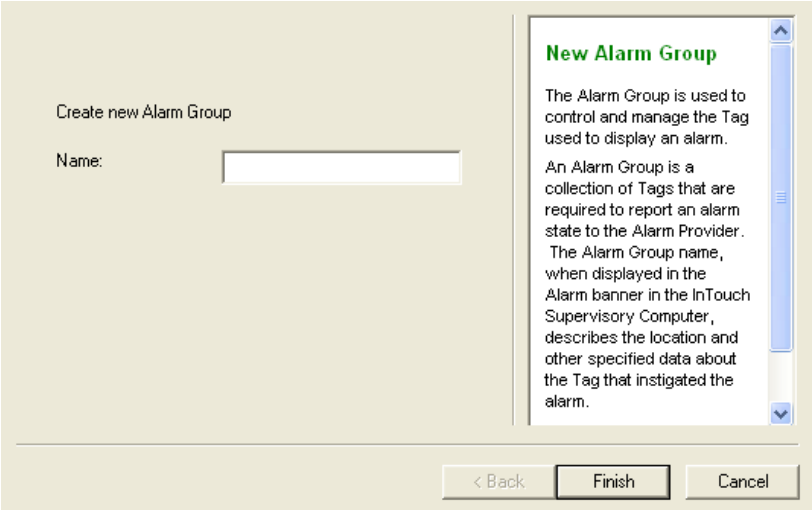
Notes:

1. Alarm Group Sets can be assigned to one or more Supervisory Computers to provide a default set of alarms. This is achieved by configuring the computer Alarm Views table in Project Organiser. Alarm Group Sets can also be assigned at runtime using the appropriate functions in WindowMaker.
2. LIN Blocks configured with an Alarm Priority 1 do not display Alarm conditions.

14.1 CREATING AN ALARM GROUP

1. Assuming that Project Organiser has remained open, select the Alarm Group folder.
2. Create an Alarm Group folder by launching the New Alarm Group wizard (File > New Alarm Group, or click on  button).

   Each Alarm Group is a collection of Tags that report an alarm, using the Alarm Group name to show relevant information about the Tag initiating the alarm.
3. The New Process Cell Wizard starts. Follow the instructions shown on each page of the wizard.
4. Click on the 'Finish' button.



Notes:

1. 'Finish' does not automatically launch the Build process.
2. Always Build from the Project folder down to the I/O Instrument Folder, or use the Full Project Build in Project Organiser (Project > Full Project Build). Refer to the Project Organiser Help File for full instructions.

During the process of creating and configuring Tags and Alarm Groups, the Wonderware Build icon shows  to indicate that Wonderware InTouch system MUST be updated, and may also require restarting the InTouch WindowViewer if currently running.

14.2 CONFIGURING AN ALARM GROUP

The Name, Description and Default Alarm Group parameters of each Alarm Group can be edited, by selecting the Properties command from the context menu to show the Properties dialog.

> Note: Alarm Groups can be used to clarify the location of an alarm.

Projects that still require Alarm Group configuration automatically contain the Alarm Groups, 'Unallocated' and 'Default'. The 'Default' group is the initial destination for all new Tags. To simplify the configuration of Alarm Groups, the name can be changed and/or a different Alarm Group can be defined as the Default. The 'Unallocated' Alarm Group contains all Tags that have yet to be used to display an Alarm condition.

> Note: If the Default container does not exist, new Tags are not assigned automatically and must instead be assigned using 'copy and paste', or 'drag and drop' techniques.

14.2.1 Assigning Tags

It is important to create Alarm Groups because it offers better organisation of the Tags used to display Alarm conditions in the Project. When the instrument and the Plant Unit exist, Tags in the instrument folder or the Plant Unit can be assigned to Alarm Groups. Any Plant Unit in the Tree view, or Tag that appears in the Tag view can be assigned to the appropriate Alarm Groups simply by dragging the Tag to the Alarm Group shown in the Tree view of Project Organiser, and dropping it.

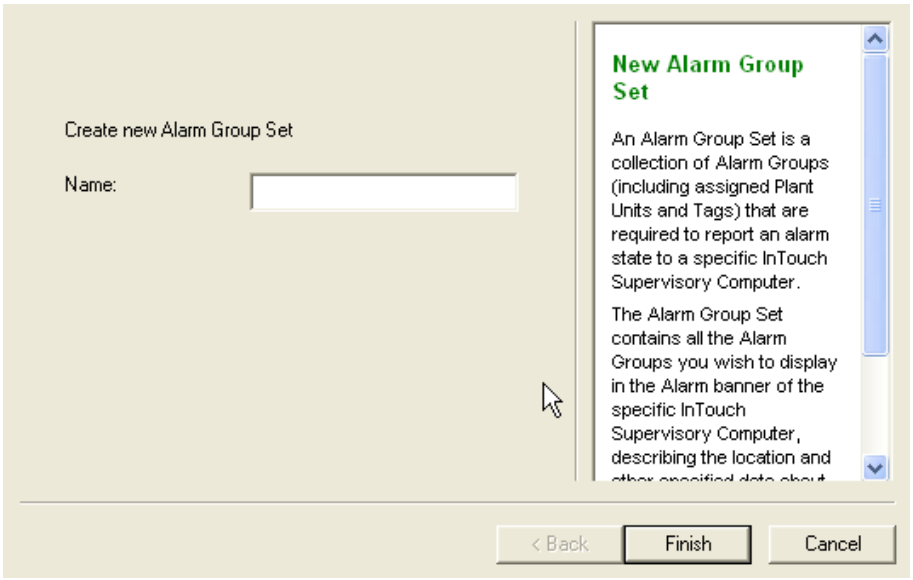
> Note: To avoid duplication of Alarm messages, Tags should be removed from the Default Alarm Group if they are also assigned to an Alarm Group, or to a Plant Unit in an Alarm Group created by a user.

14.3 CREATING AN ALARM GROUP SET

'Alarm Group Sets' allow the user to create groups of existing Alarm Groups, for reporting alarm conditions in a specific Supervisory Computer during run time. A set may be chosen to coincide with an existing Process Cell to simplify the configuration, as the Alarm Group Set contains Alarm Groups that must be displayed on a specific InTouch Supervisory Computer during run-time.

1. Assuming that Project Organiser has remained open, select the Alarm Group folder.
2. Create an Alarm Group folder by launching the New Alarm Group Set wizard (File > New Alarm Group Set or click on  button).

   Each Alarm Group Set is a collection of Alarm Groups associated Tags that report an alarm on a specific InTouch Supervisory Computer, as defined by the Alarm Views folder configured in the 'Computers' folder.



3. The New Process Cell Wizard starts. Follow the instructions shown on each page of the wizard.
4. Click on the 'Finish' button.

> Notes:
>
> 1. 'Finish' does not automatically launch the Build process.
>
> 2. Always Build from the Project folder down to the I/O Instrument Folder, or use the Full Project Build in Project Organiser (Project > Full Project Build). Refer to the Project Organiser Help File for full instructions.

14.4 CONFIGURING AN ALARM GROUP SET

The Name and Description parameters of each Alarm Group Set can be edited, by selecting the Properties command from the context menu to show the Properties dialog.

14.4.1 Assigning Tags

Alarm Groups Sets are created because it offers better organisation of the specific Tags used to display Alarms in the Project on a specific InTouch Supervisory Computer. When the Alarm Groups exist, the Tags in the Alarm Group, including any Plant Unit and its configured Tags, can be assigned to Alarm Group Sets. Any Alarm Group that appears in the Tree view of Project Organiser can be assigned to the appropriate Alarm Group Sets, simply by dragging the Alarm Group and dropping it in the relevant Alarm Group Set.

> Note: If the Alarm Group Sets are not configured, all computers display all alarm conditions raised from all Alarm Groups.

15 CONFIGURE TAG SECURITY AREAS

The Tag Security Area allows the user to create Tag Security Areas and to assign individual Tags or groups of Tags, including any that already exist in Plant Units, to those areas (i.e. it separates Tags into security specific groups).

Tag Security Areas are used in the Security Manager Editor to define which groups of Tags users are allowed to view and/or edit.

Note: Refer to the Security Manager Help File for full instructions about configuring the Security of the plant/system.

15.1 CREATE A TAG SECURITY AREA

1. Assuming that Project Organiser has remained open, select the Tag Security folder.
2. Create a Tag Security folder by launching the New Tag Security Area wizard ('File > New Tag Security Area' or click on  button).

   Each Tag Security Area is a collection of Tags that allow edits only from sources with an appropriate Access Level.

3. The New Process Cell Wizard starts. Follow the instructions shown on each page of the wizard.
4. Click on the 'Finish' button.

Notes:

1. 'Finish' does not automatically launch the Build process.
2. Always Build from the Project folder down to the I/O Instrument Folder, or use the Full Project Build in Project Organiser (Project > Full Project Build). Refer to the Project Organiser Help File for full instructions.

15.2 CONFIGURING THE TAG SECURITY AREA

The Name and Description parameters of each Tag Security Area can be edited, by selecting the Properties command from the context menu to show the Properties dialog.

Projects that still require Tag Security Area configuration automatically contain the Tag Security Area, 'Unallocated'. This contains all Tags that have yet to be assigned to an area that restricts the editing to a specific group of users, defined in the Security Manager.

15.2.1 Assigning Tags

It is important to create Tag Security Areas because it offers better organisation of the Tags used to restrict editing of specific Tags in the Project. When both the instrument and the Plant Unit exist, Tags in the instrument folder or the Plant Unit can be assigned to Tag Security Areas. Any Plant Unit in the Tree view, or Tag that appears in the Tag view can be assigned to the appropriate Tag Security Areas simply by dragging the Tag to the Tag Security Area shown in the Tree view of Project Organiser, and dropping it.

16 CONFIGURING TAG DATA AND ALARMS

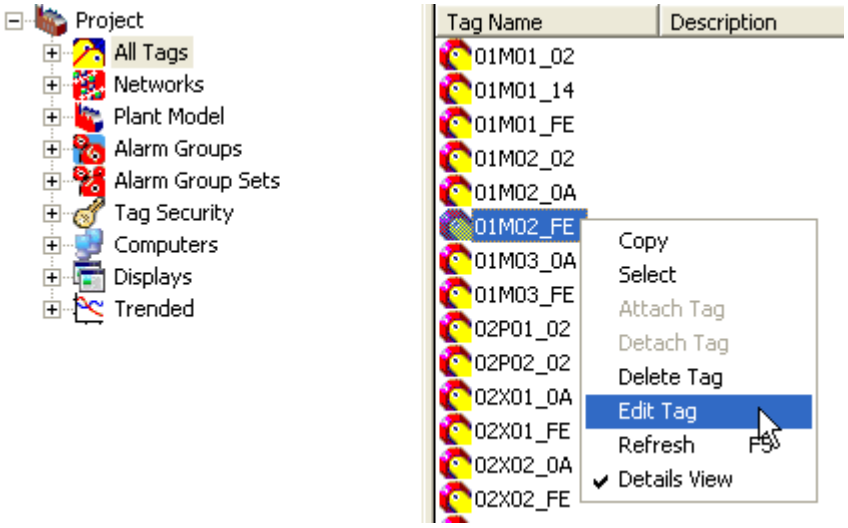
There are four methods of configuring data associated with a Tag:
TagEdit.
Tag Import.
Tag Profile Configurator.
Mass Edit.

16.1 TAG EDIT

TagEdit is the primary interface for configuring and viewing I/O block data. It provides access to all data for a single Tag. The TagEdit dialog box is launched from any Tags displayed in the Tag Browser region on the Project Organiser.

16.1.1 Using the TagEdit Utility

1. Assuming that Project Organiser has remained open, select the Tag in the Tag Browser region to reveal the context menu.
2. Select 'Edit Tag' (or double-click a Tag in a Plant unit) to launch the TagEdit dialogue showing the pages described below.
3. Edit fields on the following tabs as appropriate.



General: The Tagname can be a maximum of 12 characters. Changing Tagname does not automatically change the LIN Block name. Type and Descriptions can also be changed using Tag Import.

> Note: The Units field in TagEdit is automatically updated by the Build process in LINtools Engineering Studio.

SCADA	Ranges (These are Trend Ranges only – engineering ranges have already been configured in LINtools or iTools), InTouch FacePlate, Point Display, Home Page can also be changed using Tag Import.
Network	The LIN Block name. The LIN Block name can be a maximum of 8 characters. Changing the LIN Block name does not automatically change the Tagname.
LIN Data	The LIN Block Fields and Alarms. Changes made here are written to the Project database (for I/O) or the LINtools file as appropriate. This tab provides access to live data via the servers set up in the Project Organiser, 'Computers Properties' configuration. Online data comes from the Online Port settings configured in the LIN Network folder for the associated LIN Instrument. It is available only if the Online data is selected. The first server is used whether it is On or Offline regardless of redundancy.
IO Data	The iTools clone file fields. Changes made here will be written directly to the iTools clone file and provides access to live data via the online port configured in the Modbus/Profibus Network folder for that 2500 instrument. Online data comes from the Online Port settings configured in the Modbus or Profibus Network folder for the associated 2500 Instrument.

16.1.2 Importing tags

The Tag Import/Export Utility provides the ability to produce a list of Tags in a .csv/.txt format file, that currently exist in the Project database, or use an existing list of Tags in a .csv/.txt format file in the current Project database.

16.1.3 Tag Profile Configurator

Notes:

1. Refer to the Tag Profile Help File for full instructions about configuring the Security of the plant/system.

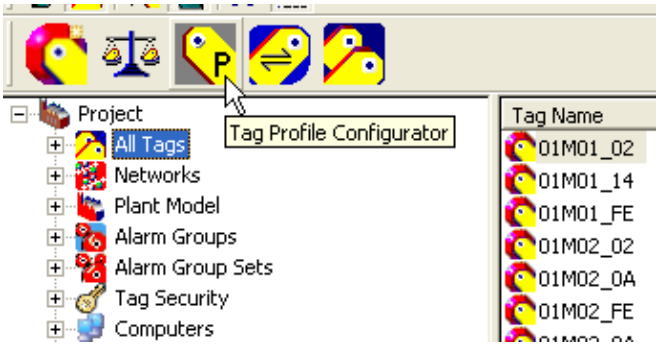
2. Before using the 'Tag Profile Configurator' the user should be aware of the changes that are involved when editing a 'Tag Profile'. It may be quicker to make the changes using a .csv/.txt format file editor after using the Tag Import/Export Utility.

The Tag Profile Configurator allows the configuration of 'Block Type' and 'Point Type' parameters that together are described as a 'Tag Profile'. All edits are made directly on the Project database and an imported 'Tag Profile' is automatically saved when the import is complete.

'Point Type' is used to provide a special point display in Operations Viewer but if there is no special point display configured it reverts to that defined by the 'Block Type'.

CREATE AN TAG PROFILE

1. Assuming that Project Organiser has remained open, select the 'All Tags' item.
2. Launch Tag Profile Configurator by clicking on  , in the Application toolbar.

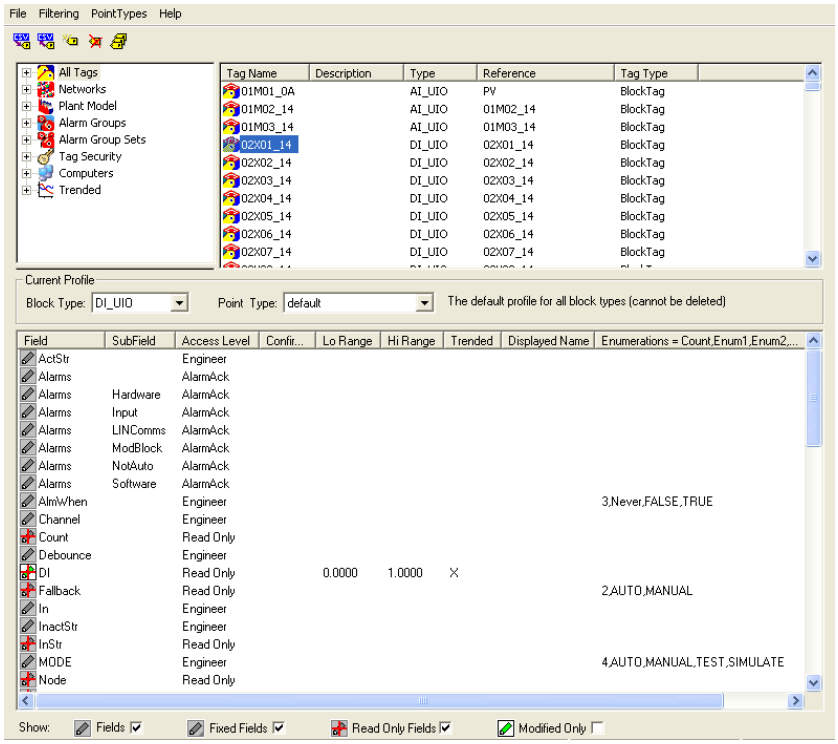


3. Select the Tag.
4. Change the 'Block Type' and 'Point Type' using the relevant pulldown.

   Note: Point Type/Block Type combinations can also be called up by double-clicking on a Tag in the Tag Browse window.

5. In the Field column on the 'Main Display', select and double-click the 'Field' that is to be edited.

   A dialogue window appears.



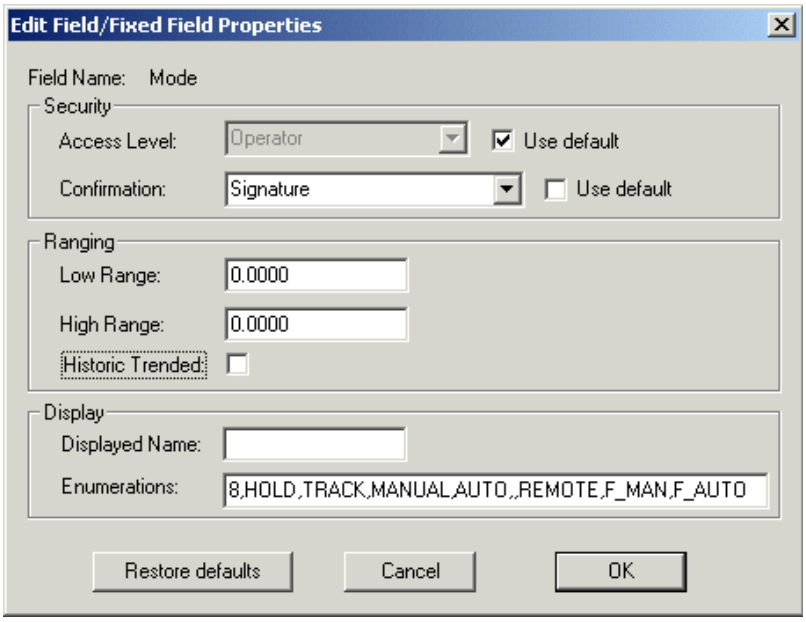
6. In the 'Edit Field...' dialogue:

   if a change to the Access Level is required, uncheck the 'Use Defaults' check box and select the desired level of restriction.

   if Confirmation is required, uncheck the 'Use Defaults' check box and select the desired level of Confirmation.

   enter a name for the selected Field when using the fixed field 'FieldName'.

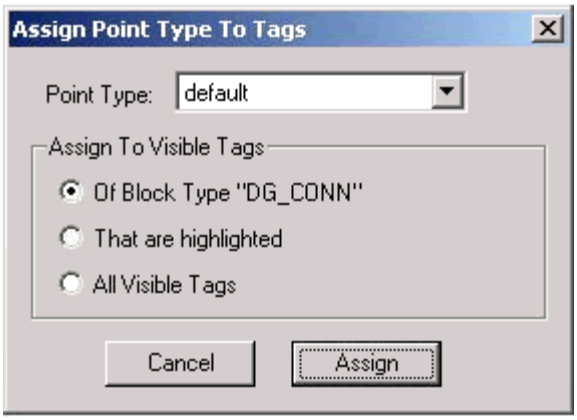
   enter a comma separated string used to override existing enumeration's or provide new enumerations for a field.



7. When the 'Tag Profile' is complete, it MUST be assigned to the appropriate Tag(s) by changing the 'Point Display'.

16.1.4 Assign a Tag Profile

1. Click on the 'Point Type' pulldown and select a 'Assign to Tags...'. Alternatively, press the Assign to Tags... button on the ToolBar. A dialogue box appears allowing the user to assign point types to multiple tags.



2. Click the appropriate radio buttons to determine the tags to which the point type is to be assigned.

   'Of Block Type...' assigns to all tags in the Tag Browser window of that type.

   'That are highlighted' assigns the point type to all the highlighted tags in the Tag Browser window.

   Note: Select the tags in the Tag Browser window before selecting the 'Assign to Tags...' option.

   'All Visible Tags' assigns the point type to all the tags in the Tag Browser window (right hand pane).

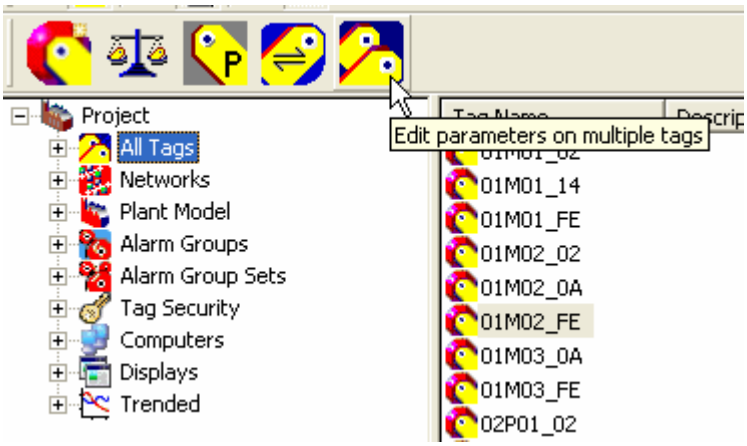
Note: Always Build from the Project folder down to the I/O Instrument Folder, or use the Full Project Build in Project Organiser (Project > Full Project Build). Refer to the Project Organiser Help File for full instructions.

16.2 MASS EDIT

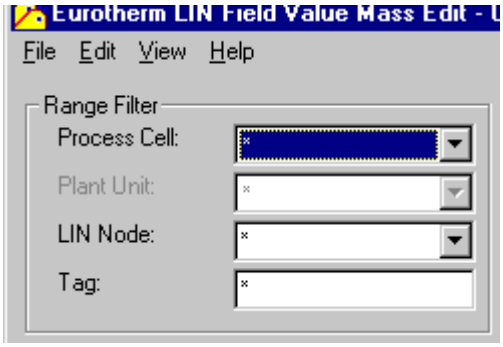
The Mass Edit Utility provides access to LIN Block Fields and Alarms for performing changes to many LIN Block Tags at the same time. Before using the utility, refer to the 'readme.txt' file that accompanies it.

Using the Mass Edit Utility

1. Assuming that Project Organiser has remained open, select the All Tags item.
2. Launch Mass Edit utility by clicking on,  .



3. Set the **Range Filters** you require. These **Filter** drop down menus restrict the search to within the set constraints.



   The * in each **Filter** drop down denotes unrestricted search boundary.

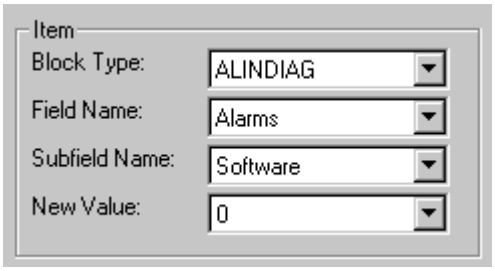
   Process Cell: Select a Process Cell to restrict the search to within that constraint. Selecting the * enables a Project wide search.

   Plant Unit: Select a Plant Unit from the selected Process Cell to restrict the search to within this constraint.

   LIN Node: Select a LIN Node from the selected Plant Unit to restrict the search to within this constraint. The selection of the * enables the selection of any LIN Node in the Project.

   Tag: Enter the Tagname if known. The * operates as a wild character (*M2_01 finds ALL Tags that end M2_01. M2_01* finds ALL Tags that start M2_01).

4. Select the required Item to display drop down menus allowing new values to be entered for a specific Field or Subfield of a specific Block Type within the restricted search constraints.



   Block Type: Select a Block Type in the Project.

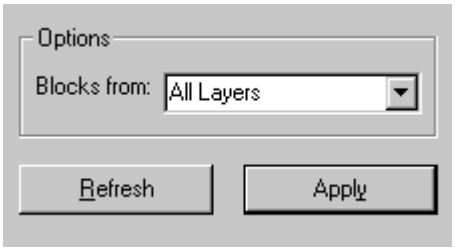
   Field Name: Select a Field Name from the Block Type fields available.

   Subfield Name: Select a Subfield Name from the Block Type. Not ALL fields have Subfields.

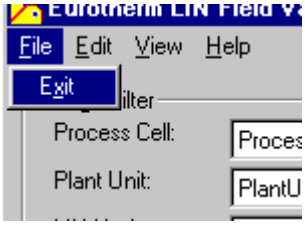
   New Value: Do not select a new value yet.

5. Click 'Refresh' to display all Tags that are assigned to the Field Name or Subfield Name within the search constraints in the Main Display.

   If required, refine the search shown in the Main Display by removing the check mark from the Tags which are not to change.



6. Select a value from the New Value drop down. This may be either a numeric, condition or a state value depending on the selection of the Field or Subfield.



7. Click Apply to accept the new value. All selected Tags are then updated.
8. Repeat this process for all other Block Field combinations.
9. Close Mass Edit (File > Exit).

Note: Always Build from the Project folder down to the I/O Instrument Folder, or use the Full Project Build in Project Organiser (Project > Full Project Build). Refer to the Project Organiser Help File for full instructions.

17 CONFIGURE CUSTOM LIN CONFIGURATIONS

Once the I/O has been created, LIN strategies can be created using:

1. Standard LINtools Engineering Studio database configuration. This uses a one of each of .dbf, .dtf, and .grf LIN instrument files.
2. A Blended LIN instrument database configuration. This uses more than one .dbf, .dtf, and .grf LIN instrument file and requires a build list configured using the appropriate LINtools command.
3. A Blended LIN instrument database configuration and the IO Manager. For T800 and T940 only, this uses more than one .dbf, .dtf, and .grf LIN instrument file a build list configured using the appropriate LINtools command.

   LINtools User Layers are combined using the build list (*.ubl). If the build list (*.ubl) was NOT created along with the instrument, it can be created at any time when the Use Blended Database option is selected.

Notes:

1. Blended Databases are recommended for use by LINtools Advanced users only.
2. LINtools Engineering Studio also supports the configuration of the I/O for LIN based I/O Instruments.
3. Refer to the LIN Blocks Reference Manual and Application & Control Modules Operator Manual for full details of individual blocks.
4. Refer to the T800 Visual Supervisor Tutorial for full details of T800 unique LIN Blocks. Unique Eycon LIN Blocks are described in the Eycon Visual Supervisor Tutorial.
5. Any LIN strategy requiring the use of a build list must NOT contain more than one *.ubl file in the LIN Instrument folder as this could cause problems if the incorrect *.ubl file is used during the build process.

17.1 USING LINTOOLS ENGINEERING STUDIO

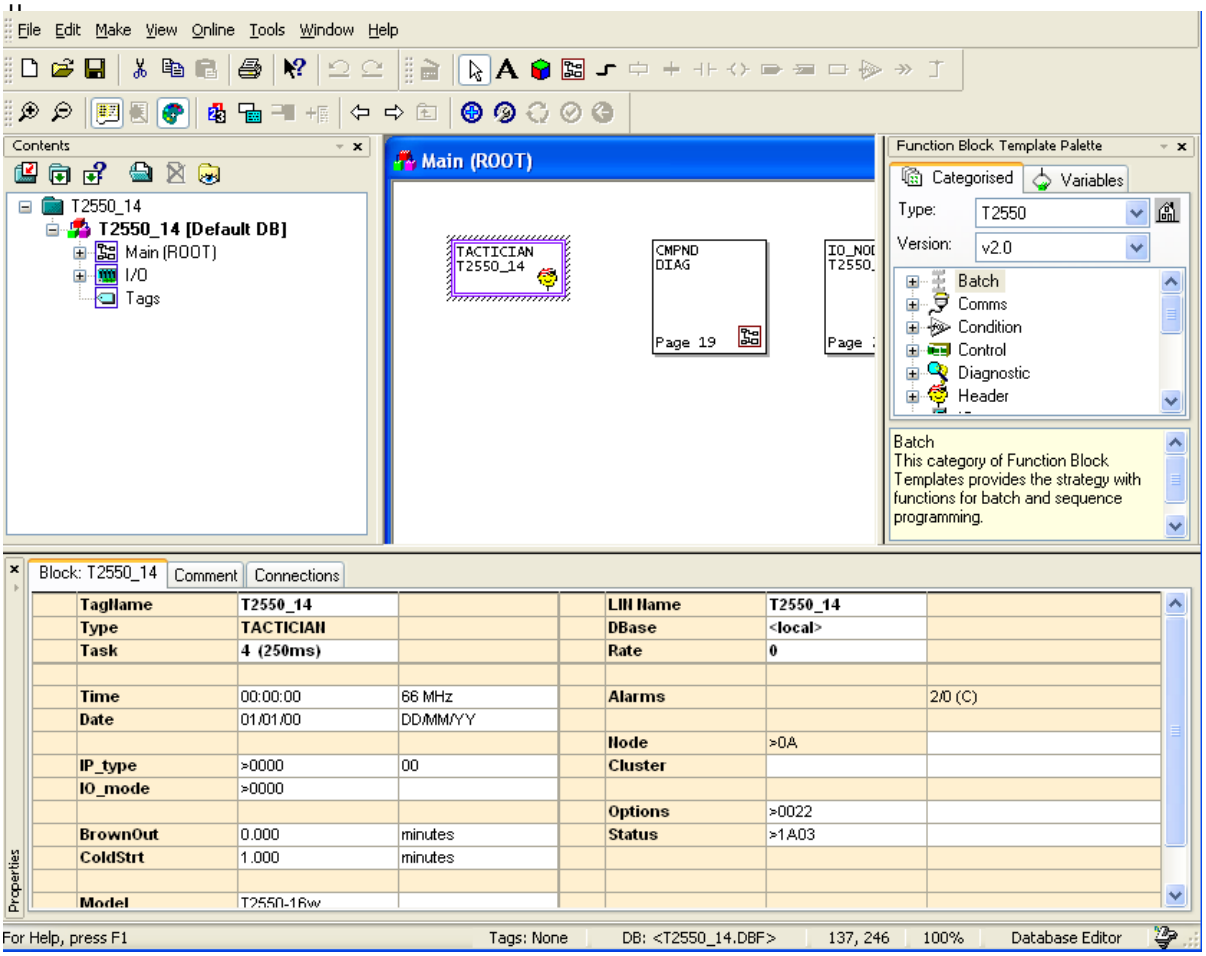
LIN Instrument folders store all the Instrument configuration files related to an Instrument in a Network. These Instrument folders include the control options for Online Monitoring (or Online Connect) and Download operations. The Instrument folders of some instruments (e.g. T2550 PAC) also support Online Reconfiguration. If the Network folder containing the instruments has not been configured for this purpose the options are unavailable (greyed out). Refer to the LINtools Engineering Studio Help file for full details.

Launching the LINtools Engineering Studio

1. Assuming that Project Organiser has remained open, locate the LIN Instrument.
2. Select the LIN Instrument folder.
3. Launch LINtools Engineering Studio by clicking on,  , in the Application toolbar.

   Note: LINtools supports upto 16 character Tagnames, if correctly configured, but is always limited to an eight-character LIN Name.

4. The Get me started wizard appears, if not previously disabled, offering a selection of most commonly



The following shows the files the user might expect to see and use in the different instruments. It is not a complete list.

Note: Refer to the relevant instrument and software manuals for full details about which files exist.

17.1.1 T640 Configuration files

<file>.dbf/dtf/grf	LINtools instrument configuration file – Only the .dbf file needs to be downloaded.
<file>.uqd/uqt/uqg	Generic Sequence file (creates the specific sequence).
<file>.uqm	Generic Sequence map file.
<file>.sdb/sdt/sgx	Specific Sequence file – May be created manually or generated from a Generic Sequence File. If used, only the .sdb files need to be downloaded to the T640.
<file>.stx/sto	Action code file. If used, only the .sto file needs to be downloaded to the T640.
<file>.gwf/gwt	Modbus file – Used to support communication between the T640 and either Modbus Master or Slave devices. If used, the .gwf needs to be downloaded to the T640.

17.1.2 T940(X) Configuration files

List.ujd	List of the files to be downloaded to the T940(X).
Base.dbf/dtf/grf	LINtools instrument configuration (Contains the Header block and diagnostics).
<name>.ubl	Build list – Add any use layer .dbf files in here. This defines what layers to merge together to create the final T940 configuration.
<layer>.dbf/dtf/grf	User Layer. LINtools instrument configuration. You can have up to 16 layers including the base layer. Needs to be added to T940_nn.ubl to be included in the output file.
<file>.uqd/uqt/uqg	Generic Sequence file (creates the Specific Sequence).
<file>.uqm	Generic Sequence map file.
<file>.sdb/sdt/sgx	Specific Sequence file – May be created manually or generated from a Generic Sequence File. If used, only the .sdb files need to be downloaded to the T940(X).
<file>.stx/sto	Action code file. If used, only the .sto files need to be downloaded to the T940(X).
<file>.gwf	Modbus Gateway file – Used to support TMA (Transparent Modbus Addressing or Talk Through) so that you can communicate iTools to the 2500 via the T940(X) Slave port. Needs to be downloaded to the T940(X).
<profile>.uym	Modbus profile – For mapping 3rd party Modbus slaves onto DCM blocks. If used, needs to be downloaded to the T940(X).

Note: Refer to the LIN Block Reference Manual.

<profile>.uyp	Profibus profile – For mapping 3rd party Profibus slaves onto DCM blocks. If used, needs to be downloaded to the T940(X).

Note

Refer to the LIN Block Reference Manual.

<instrument>.gsd	Profibus file for 3rd party Profibus instruments (supplied by the manufacturer). If used, needs to be downloaded to the T940(X).
<file>.dbf	Resultant instrument configuration file (created when you perform a build). Needs to be downloaded to the T940(X).

17.1.3 Visual supervisor configuration files

List.ujd	List of the files to be downloaded to the T800 or Eycon.
Base.dbf/dtf/grf	LINtools instrument configuration (Contains the Header block and diagnostics).
<name>.ubl	Build list – Add any use layer .dbf files in here. This defines what layers to merge together to create the final T800 or Eycon configuration.
<layer>.dbf/dtf/grf	User Layer. LINtools instrument configuration. You can have up to 16 layers including the base layer. Needs to be added to <name>.ubl to be included in the output file.
<file>.uqd/uqt/uqg	Generic Sequence file (creates the specific sequence).
<file>.uqm	Generic Sequence map file.
<file>.sdb/sdt/sgx	Specific Sequence file – May be created manually or generated from a Generic Sequence File. If used, the .sdb files need to be downloaded to the T800 or Eycon.
<file>.stx/sto	Action code file. If used, the .sto files need to be downloaded to the T800 or Eycon.
<file>.uxp/ofl	User Screen Configuration - The .ofl files need to be downloaded to the T800 or Eycon.
<file>.uys	Setpoint Program. If used, needs to be downloaded to T800 or Eycon.
<file>.gwf	Modbus Gateway file – Used to support TMA (Transparent Modbus Addressing (Talk Through/TalkThru)) so that you can communicate iTools to the 2500 via the T800 Modbus Slave port. You need to setup the T800 comms to enable this. If used, needs to be downloaded to the T800 or Eycon.
<profile>.uym	Modbus profile – For mapping 3rd party Modbus slaves onto DCM blocks in a T800 only. If used, needs to be downloaded to the T800.

Note: Refer to the LIN Block Reference Manual.

<profile>.uyp	Profibus profile – For mapping 3rd party Profibus slaves onto DCM blocks in a T800 only. If used, needs to be downloaded to the T800.

Note: Refer to the LIN Block Reference Manual.

<instrument>.gsd	Profibus file for 3rd party Profibus instruments (supplied by the manufacturer). If used, needs to be downloaded to the T800 or Eycon.
<file>.dbf	Resultant instrument configuration file (created when you perform a build). Needs to be downloaded to the T800 or Eycon.
<file>.uyn	Dictionary file. If used, needs to be downloaded to the T800 or Eycon.
<file>.uyr	Recipe file. If used, needs to be downloaded to the T800 or Eycon.
<file>.uyb	Batch file. If used, needs to be downloaded to the T800 or Eycon.
<file>.uyl	User Dictionary (for customisation of menus). If used, needs to be downloaded to T800 or Eycon.
<file>.uyf	Report file. If used, needs to be downloaded to the T800 or Eycon.

17.1.4 T2550/T2750 Configuration files

List.ujd	List of the files to be downloaded to the Instrument.
Base.dbf/dtf/grf	LINtools instrument configuration (Contains the Header block and diagnostics).
<name>.ubl	Build list – Automatically edited as new layer .dbf files are added in LINtools. This defines what layers to merge together to create the final Instrument configuration.
<layer>.dbf/dtf/grf	User Layer. LINtools instrument configuration. You can have up to 16 layers including the base layer. Automatically added to the T2550_nn.ubl to be included in the output file.
<file>.uqd/uqt/uqg	Generic Sequence file (creates the specific sequence).
<file>.uqm	Generic Sequence map file.
<file>.sdb/sdt/sgx	Specific Sequence file – May be created manually or generated from a Generic Sequence File. If used, the .sdb files need to be downloaded to the Instrument.
<file>.stx/sto	Action code file. If used, the .sto files need to be downloaded to the Instrument.
<file>.uys	Setpoint Program. If used, needs to be downloaded to Instrument.
<file>.gwf/ujg	Modbus Gateway file – Used to support TMA (Transparent Modbus Addressing (Talk Through/TalkThru)) so that you can communicate iTools to the I/O via the T2550/T2750 Modbus Slave port. You need to setup the Instrument comms to enable this. If used, needs to be downloaded to the Instrument.
<file>.dbf	Resultant instrument configuration file (created when you perform a build). Needs to be downloaded to the Instrument.

18 CONFIGURING THE DISTRIBUTED SYSTEM

The Wizards and Properties page relating to the Computer, allows the user to edit information in the Project Database relating to the computer system and its behaviour in different circumstances.

This is used to define each Computer (server or client) that is to be included in the system. If a computer does not appear in the list, it cannot run the Factory Suite Client Applications or LINData Server.

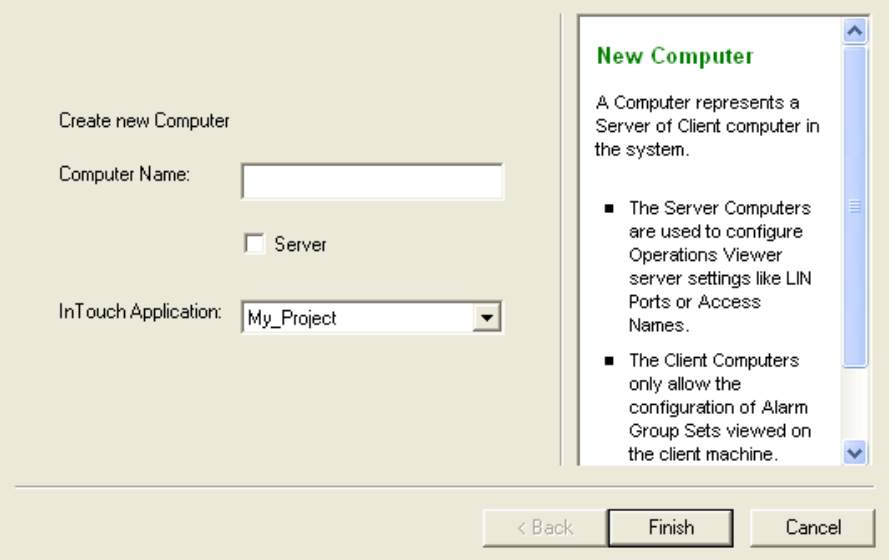
Most required Distributed System parameters can be edited via the relevant Computer Properties dialog.

Note: The Project Configurator is recommended for use by Advanced users only.

18.1 CREATE DISTRIBUTED SYSTEM COMPUTERS

1. Assuming that Project Organiser has remained open, select the Computers folder.
2. Create a Computer folder by launching the New Computer wizard (File > New Computer)

   Each Computer represents a Server or Client Computer used in plant/system, and defines the InTouch Application used by this Project.



Notes:

1. The Computer used to create the Project is automatically generated and configured as a Server, when the New Project wizard is completed.
2. If the Computer used to create the Project is not to be included in the Project, it must be removed.

3. The New Process Cell Wizard starts. Follow the instructions shown on each page of the wizard.
4. Click on the 'Finish' button.

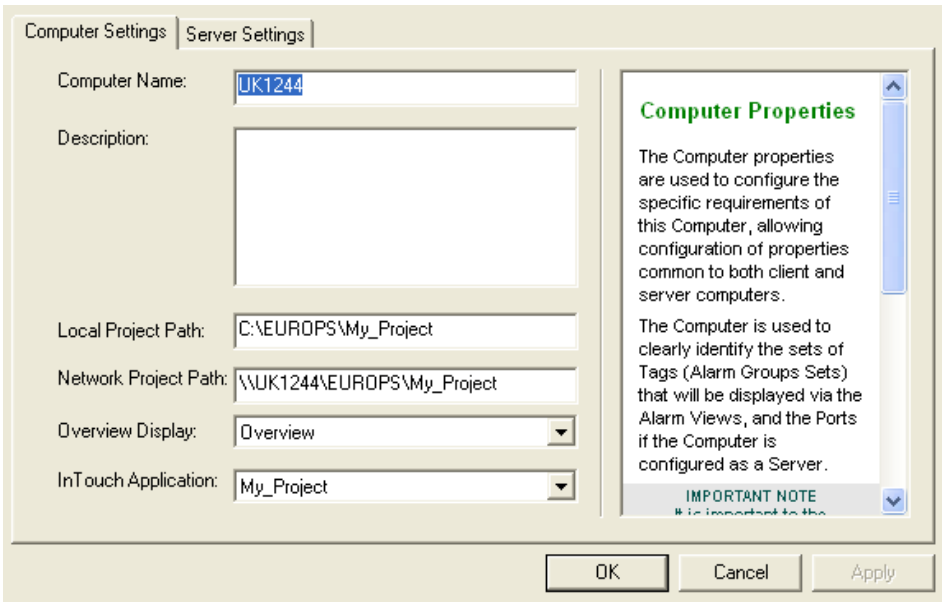
Notes:

1. 'Finish' does not automatically launch the Build process.
2. Always Build from the Project folder down to the I/O Instrument Folder, or use the Full Project Build in Project Organiser (Project > Full Project Build). Refer to the Project Organiser Help File for full instructions.

18.2 CHANGING COMPUTER PROPERTIES

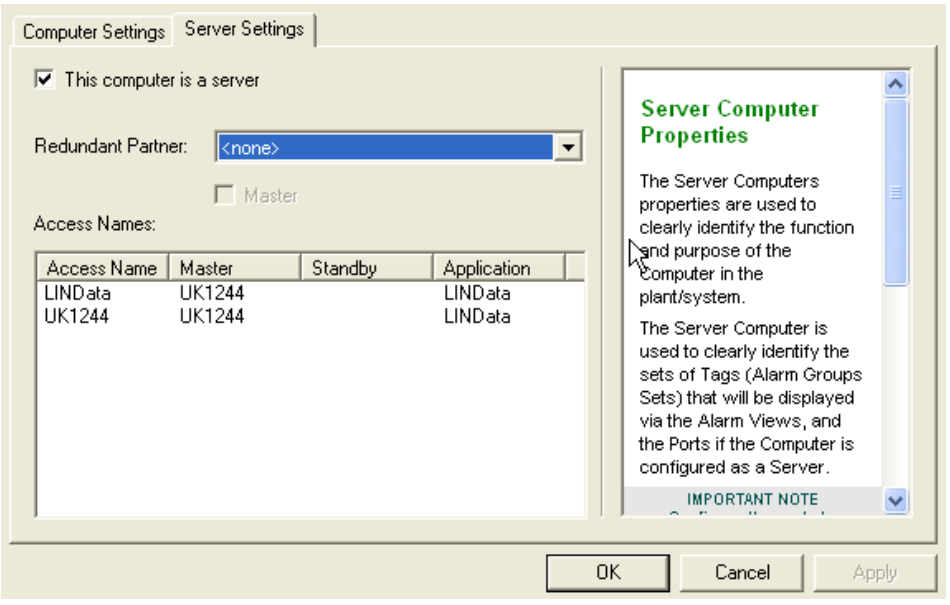
The Computer Properties dialogue replaces the following pages configured using the Project Configurator:
InTouch Application Name,
Operations Viewer/Server Computers,
Access Names (automatically created default identification for access to the I/O Servers, the application on the Server and the Security User Name. Further Access Names can be created using the Project Configurator)

1. Assuming that Project Organiser has remained open, select the Computers folder.
2. Select the Computer icon to reveal the context menu.
3. Select Properties. The Computer Settings page appears.
4. Edit the appropriate fields as required.



5. Select the **Server Setting** page.
6. Edit the appropriate fields as required.

   Any two Computers can be configured as Server Computers (one configured as the Master), indicated by the checkbox; the second Server Computer being defined using the Redundant Partner field.



   The Master and Secondary Servers determine the data and alarm source for the client computers. Client computers receive data and alarm information from the Master Server. If the Master Server fails for any reason, the data and alarm information is transmitted from the Secondary Server.

7. Close the Properties window.

18.3 OPERATIONS SERVERS

Note: The following information is for use by Advanced Project engineers only. It is not the recommended method of configuring Operations Servers in a Project, and applies only if using the Advanced Project Configuration Tool from the Project Organiser.

This configuration is used to indicate which LINOPC Servers will provide alarms, and to configure the rôle of each server as an Alarm Provider. There are four Server configuration options, described below, that may be combined to allow multiple server systems.

SINGLE SERVER CONFIGURATION

This automatically configures the Server to operate in Hot Standby and the Alarm Provider to get its watchdog from COM Port 0. Setting the watchdog to COM Port 0 (zero) stops the Alarm Provider opening the COM port and therefore allows other applications, such as iTools, to use the port when required.

REDUNDANT PAIR CONFIGURATION

This automatically configures the two Servers to operate in Hot Standby and the watchdog to read Com Port 1.

Each server stores a time-stamped alarm entry. The alarm is time-stamped by a Visual Supervisor or T940 LIN instrument, or by the server clock for other LIN instruments. The time-stamp of an alarm generated by the Visual Supervisor or T940 LIN instrument causes an exact duplicate of the alarm in the Alarm History. Whereas the time-stamp of an alarm generated by other LIN instruments, e.g. T640 and T103, is derived from the server clock, causing each server to store a unique entry of the alarm in the Alarm History.

Note: The time-stamps of an alarm will be different even if the servers are time synchronised.

The Alarm History display is designed to filter duplicate alarm entries, i.e. alarms generated by Visual Supervisor and T940 LIN instruments. Alarms generated from other LIN instruments appear twice in a Redundant Pair configuration because the time-stamp on an alarm from each server is different. To prevent these duplicate alarm entries in the Alarm History display, an RS232 serial link (with pins 2 and 3 crossed over) is required between the com ports. The choice of serial port is configurable through the tuning dialogue on the Alarm Provider and is most conveniently accessed whilst running. The serial link causes only one of the servers to store alarms in the Alarm History. If that server fails, the other server takes control.

To disable the serial link and make it available to other applications, set the Alarm Provider to Hot Standby and the Com port to 0 (zero) in the Alarm Provider configuration, as for the Single Server configuration. This option would be used for systems including only Visual Supervisor and T940 instruments.

Because each block cached from an instrument to a server consumes resources in that instrument, a redundant pair configured as ‘No Standby’ using the Project Configurator, doubles the amount of resources consumed. Ensure each LIN Instrument can support the consumed resources from the communicating servers. Failure to ensure this may result in loss of communication to random Blocks in that instrument.

If resources in a LIN instrument are not available, using the serial link and configuring the Standby Server to Standby using the Project Configurator will only cache and generate alarms when the Primary Server fails, hence the resources switch from one server to the other in the instrument.

Note: If the system contains LIN instruments other than Visual Supervisors and T940s, and the user requires the use of an application such as iTools that also uses a COM Port, another COM port card must be fitted (if the server has only a single COM port fitted).

18.4 CREATING COMPUTER SERVER PORTS

This defines which port(s) a Server Computer uses to access instruments within a network specified in the Networks folder.

Any Modbus or Profibus networks that are connected to a Visual supervisor or T940 Instruments that have been configured with an online port in the Networks folder will appear here.

1. Assuming that Project Organiser has remained open, select the Computers folder.

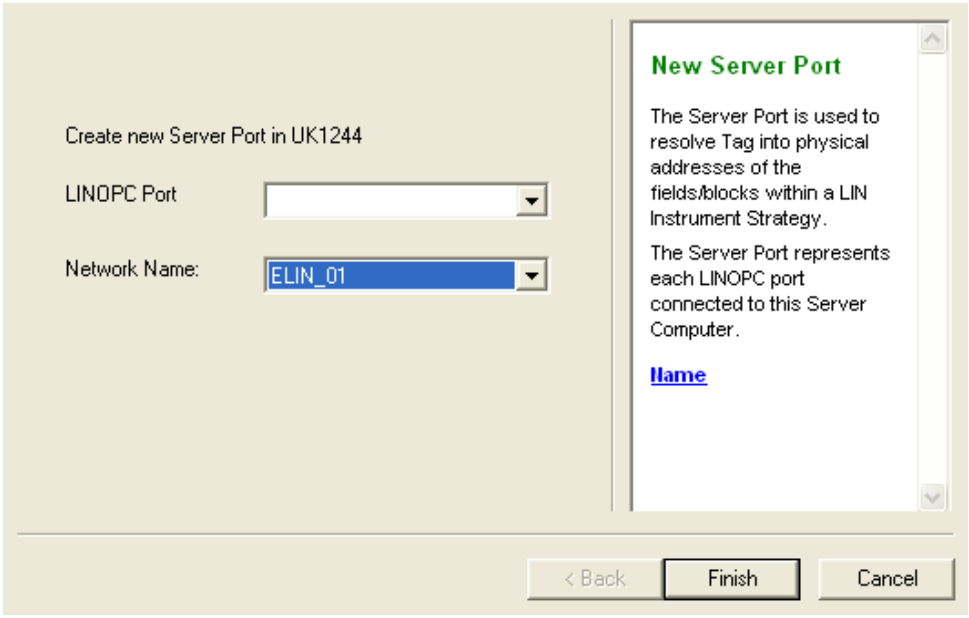
> Note
>
> Any Ports that already exist in the LINOPC Control Panel will be automatically included in the Project, when the New Project wizard is completed.

2. Create a Server Port folder by launching the New Port wizard (File > New Port)

   Each Port represents a single LINOPC Server port connected to each Server Computer.

3. The New Process Cell Wizard starts. Follow the instructions shown on each page of the wizard.

4. Click on the 'Finish' button.



> Notes:
>
> 1. 'Finish' does not automatically launch the Build process.
>
> 2. Always Build from the Project folder down to the I/O Instrument Folder, or use the Full Project Build in Project Organiser (Project > Full Project Build). Refer to the Project Organiser Help File for full instructions.

18.5 CONFIGURING THE COMPUTER ALARM VIEWS FOLDER

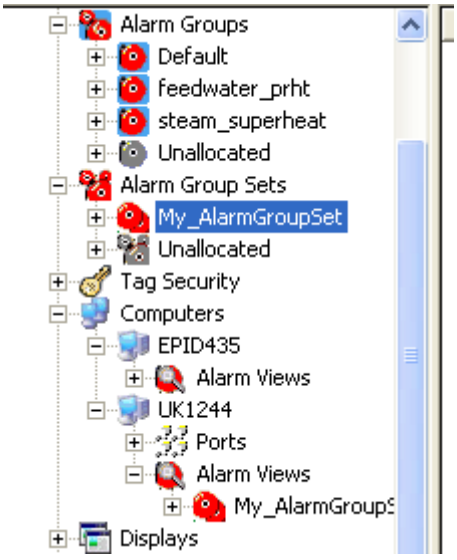
This allows an Alarm Group Set to be selected to indicate the source of an Alarm and an associated Supervisory Computer to be chosen to display that alarm.

The Computer Alarm Views Folder replaces the following pages configured using the Project Configurator: Computer Alarm Views

1. Assuming that Project Organiser has remained open, select the Alarm Group Sets folder.
2. Expand this folder to show the Alarm Groups Sets, including each configured Alarm Group.

   Each of these Alarm Group Sets can be added to any Computer containing the Alarm Views folder, simply by dragging the Alarm Group Set and dropping it in to the relevant Alarm View folder.

   The 'Default' group is the initial destination for all new Tags, but this can be changed at any time. The 'Unallocated' Alarm Group contains all Tags that have yet to be configured to display an Alarm condition on a specific Computer, but will show the alarm condition on all Computers.



Notes: Always Build from the Project folder down to the I/O Instrument Folder, or use the Full Project Build in Project Organiser (Project > Full Project Build). Refer to the Project Organiser Help File for full instructions.

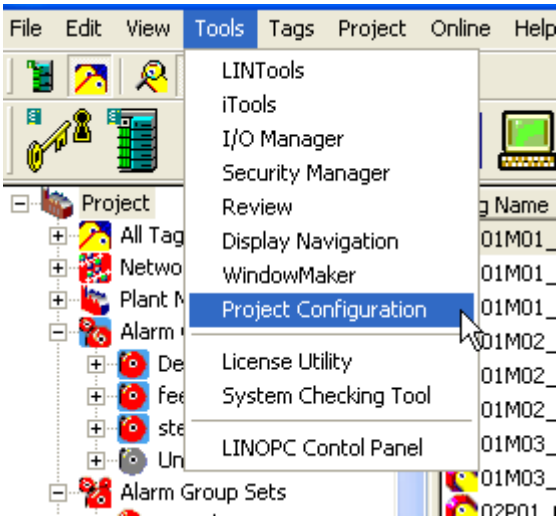
19 USING THE PROJECT CONFIGURATOR

Note: The Project Configurator is recommended for use by Advanced users only.

The Project Configurator (ESCONFIG) allows you to edit information in the Project Database relating to the computer system and its behaviour in different circumstances.

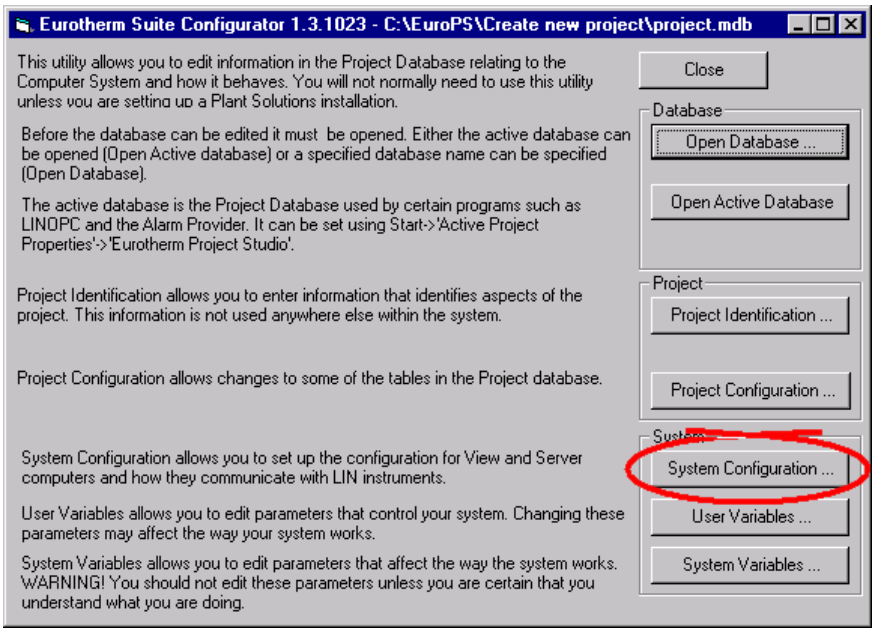
Note: The tables within this Configurator must be configured in the order given.

1. Assuming that Project Organiser has remained open, select the Project folder.
2. Launch Project Configurator by pressing the relevant icon,  , in the Application toolbar. This opens the EurothermSuite Configurator.



19.1 SYSTEM CONFIGURATION

1. Click 'System Configuration'. This opens the Computer Configuration dialogue box.



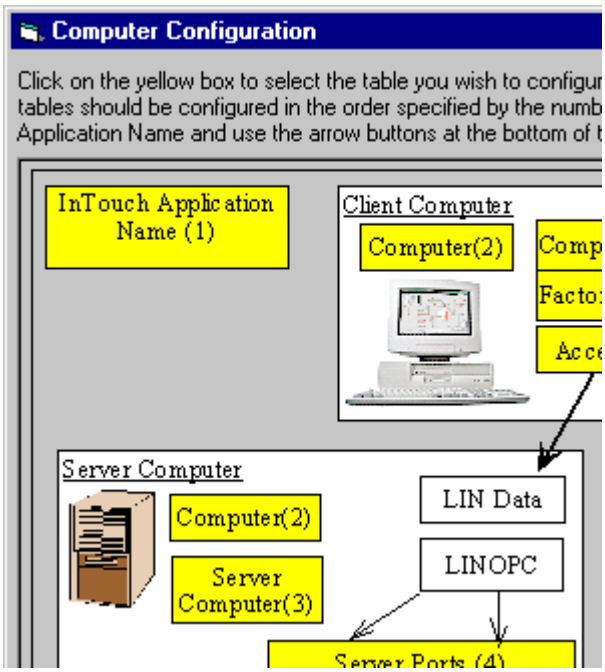
19.1.1 InTouch Application Name

This is the name used in WindowMaker and the FactorySuite InTouch Application folder that stores the InTouch Application files and is located at

<project name>\FactorySuite\Clients\InTApps\<InTouch Application folder name>

More than one FactorySuite InTouch Application can be defined in a Project allowing different graphics to be run on different Computers but based in the same Project. This option is available only by editing the ufolder.ini file located in the Project folder and changing the Project Configurator entry as follows: -

Project Configurator=ESConfig.exe /OpPDB "%1\project.mdb" /MultipleApplications



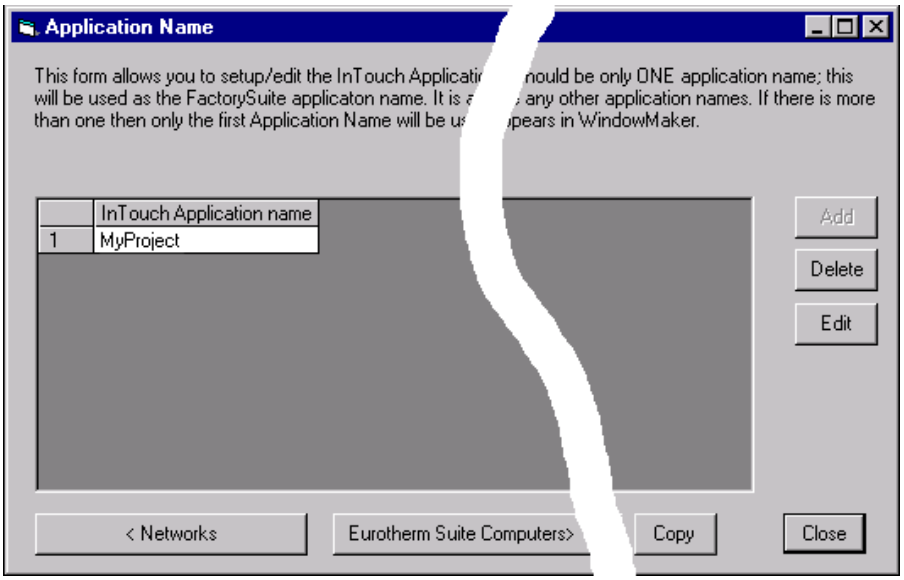
1. Open InTouch Application Name (1).

2. Configure the InTouch Application Name.

   Add. Available only if multiple applications are configured in the ufolder.ini file.

   Delete. Removes the selected InTouch Application Name from the list.

   Edit. Amends the InTouch Application Name. Change the Name and click Update Record to confirm changes.

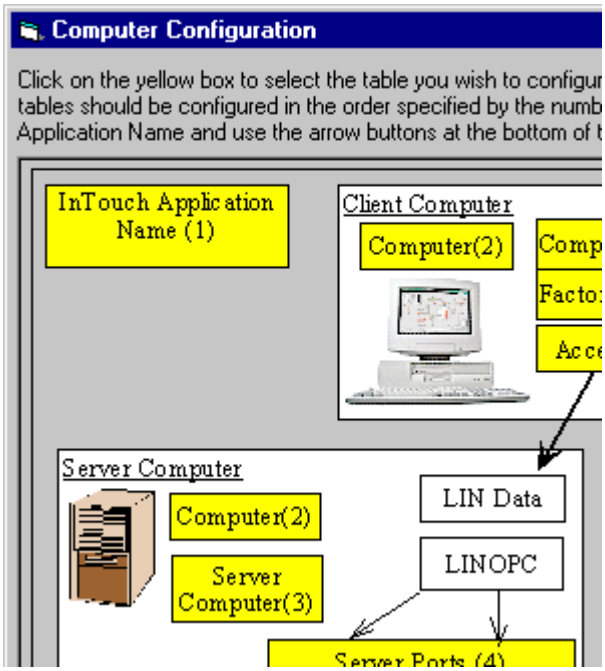


Note: A new InTouch Application will be created if the InTouch Application folder does not exist when a Build is performed.

3. Close InTouch Application Name dialogue box.

19.1.2 Computers

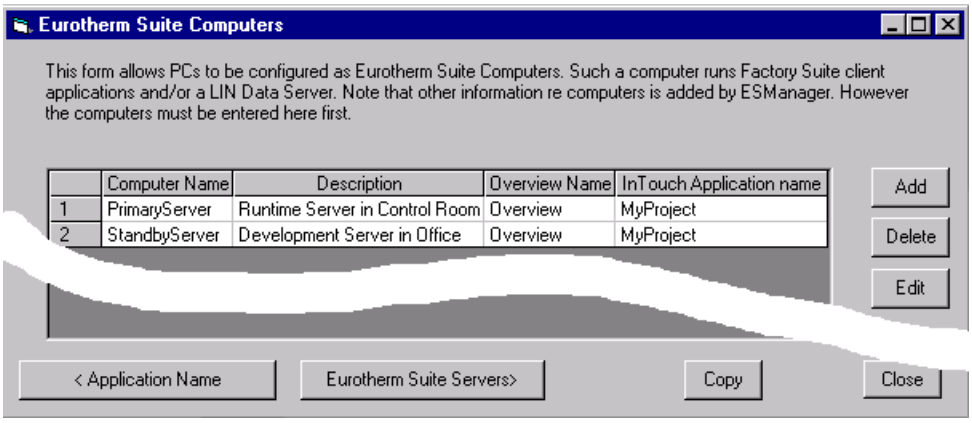
This is used to define the server and/or client computers that are to exist in the system. If a computer does not appear in the list, it will NOT be able to run the Factory Suite Client Applications or LINData Server.



1. Find the Server Computer or Client Computer section, and click Computer(2).

   This opens the current list of Computers.

2. Configure the Computers.



   Add. Enter all computers that are to exist in the system. Complete the fields as appropriate and click Add Record.

   Delete. Removes selected computer record from list without requesting confirmation.

   Edit. Amends the specifics of the selected computer.

Computer Name	enter the computer to use the selected InTouch Application.
Description	enter a description of the selected computer.
Overview Name	select the Overview Display Block to be shown by InTouch WindowViewer on the specified computer.
InTouch Application Name	select the required InTouch Application Name as defined in the InTouch Application Name table.

Note: Available only if multiple applications are configured in the ufolder.ini file.

3. Click Update Record to confirm changes.
4. Close Computers dialog box.

19.1.3 Servers

Note: The following information is for use only by Advanced Project Engineers. It is not the recommended method of configuring the Servers in a Project, and applies only if the Advanced Project Configuration Tool from the Project Organiser is being used.

This is used to indicate which LINOPC Servers will provide alarms, and to configure the role of each server as an Alarm Provider. There are four Server configuration options, described below, that may be combined to allow multiple server systems.

DISABLED SERVER

Any server configured as Disabled does not provide alarms.

SINGLE SERVER

This configuration requires the server to be configured as No Standby and the Alarm Provider to get its watchdog from COM Port 0 (zero).

The No Standby setting instructs the server to provide alarms only for LIN Nodes configured as Standby Route = False in the Server Ports To LIN Nodes table.

Setting the watchdog to COM Port 0 stops the Alarm Provider opening the COM port thus allowing other applications, such as iTools, to use the port when required.

REDUNDANT PAIR CONFIGURATION

This configuration requires two servers (both configured as 'Hot Standby') and the watchdog to be set to read Com Port 1. In the 'Server Ports To LIN Nodes' table the Primary Server has LIN Nodes configured as Standby Route = False while the Standby Server has LIN Nodes configured as Standby Route = True.

Each server stores a time-stamped alarm entry. The alarm is time-stamped by the Visual Supervisor or T940 instrument or by the server clock for other LIN instruments. The time-stamp of an alarm generated by the Visual Supervisor or T940 causes a duplicate of the alarm to appear in the Alarm History. The time-stamp of an alarm generated by other LIN instruments, derived from the server clock, causes each server to store a unique entry of the alarm in the Alarm History.

Note: The time-stamps of an alarm are different even if the servers are time synchronised.

The Alarm History display is designed to filter duplicate alarm entries (i.e. alarms generated by Visual Supervisor and T940 LIN instruments). Alarms generated from other LIN instruments appear twice in a Redundant Pair configuration because the alarm time-stamp is different for each server. To prevent these duplicate alarm entries in the Alarm History display, an RS232 serial link (with pins 2 and 3 crossed) is required between the com ports. The choice of serial port is configurable through the tuning dialog on the Alarm Provider and is most conveniently accessed when running. The serial link causes only one of the servers to store alarms in the Alarm History. If that server fails, the other server takes control.

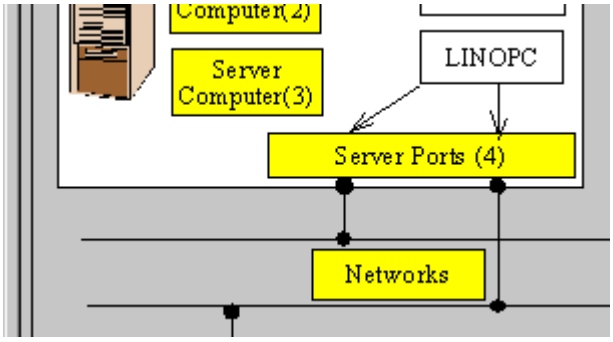
To disable the serial link and make it available for other applications, set the Alarm Provider to Hot Standby and the Com port to 0 (zero) in the Alarm Provider configuration. This option would be used for systems which include only Visual Supervisor and T940 instruments.

As each block cached from an instrument to a server consumes resources in that instrument, a redundant pair configured as No Standby doubles the amount of consumed resources. Ensure each LIN Instrument can support the consumed resources from the communicating servers. Failure to do this may result in a 'random' loss of communication with Blocks in that instrument.

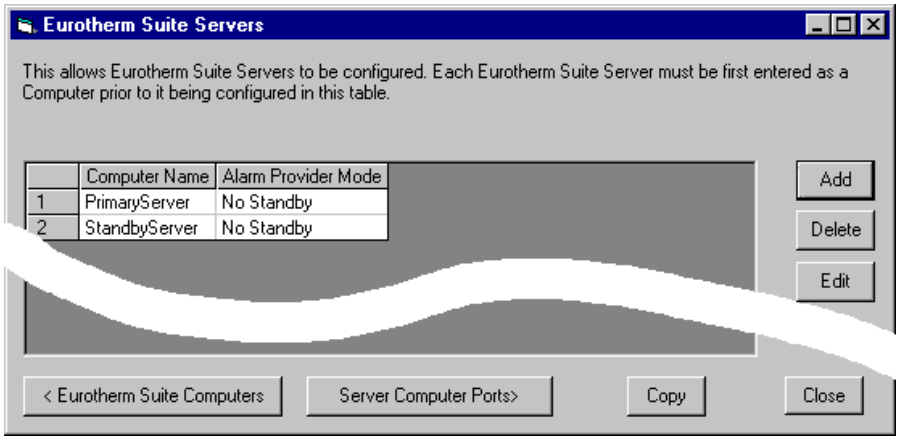
If resources in this LIN instruments are not available, using the serial link and configuring the Standby Server to 'Standby' will cause alarms to be cached and generated only if the Primary Server fails and the resources switch from one server to the other in the instrument.

> Note: If any LIN instrument other than a Visual Supervisor or a T940 is included in the system, and another application, (e.g. iTools), that also uses a COM Port is required, another COM port card must be fitted (if the server has currently only a single COM port).

1. Find the Server Computer section, and click Server Computer (3). This opens the current list of Server Computer.



2. Configure the Server Computers.



Add. Enter selected LINData Computer as a LINOPC LINData Server and select the Alarm Provider Mode required. Click Add Record.

Delete. Removes the selected computer without confirmation.

Edit. Amends the Server's Alarm Provider Mode configuration.

Computer Name (greyed out) select the computer.

Alarm Provider Mode

select the role of the server as an Alarm Provider.

Disabled, the server will not provide alarms.

No Standby, the server ONLY provides alarms for LIN Nodes configured as Standby Route = False in the Server Ports to LIN Nodes table (i.e. Primary Server). LIN Nodes configured as Standby Route = True in the Server Ports To LIN Nodes table are ignored.

Standby, the server provides alarms for LIN Nodes configured as Standby Route = False in the Server Ports to LIN Nodes table (i.e. Primary Server). It also provides alarms for LIN Nodes configured as Standby Route = True in the 'Server Ports to LIN Nodes' table (i.e. Standby Server). These are ONLY cached and generated if the server cannot communicate with another server configured as Standby or Hot Standby via an RS232 serial link. If the serial link is not ready, the server always generates these alarms.

Hot Standby, the server provides alarms for LIN Nodes configured as Standby Route = False in the 'Server Ports to LIN Nodes' table (i.e. Primary Server).
It also provides Summary and Historical alarms for LIN Nodes configured as Standby Route = True in the 'Server Ports to LIN Nodes table' (i.e. Standby Server). Historical alarms are generated only if the server cannot communicate with another server configured as Standby or Hot Standby via an RS232 serial link. If the serial link is not ready, the server always generates these alarms.

3. Update Record to confirm changes.

Note: See also the 'Server Ports to LIN Nodes' Section.

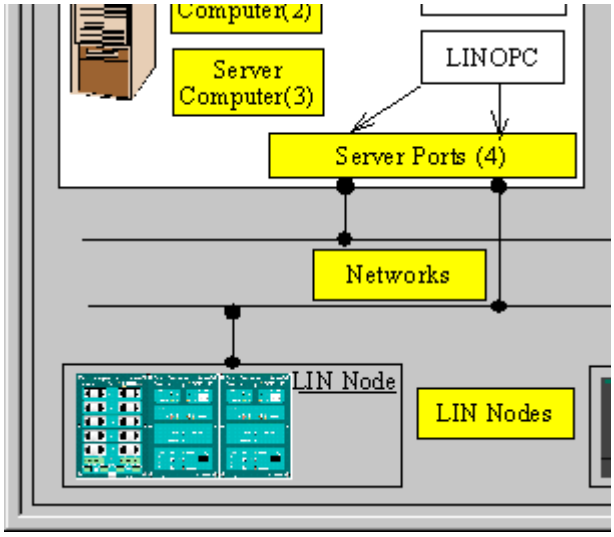
4. Close Computer Servers dialogue box.

19.1.4 Server Ports

This area configures the port(s) a Server Computer is using to access instruments within a network specified in the Networks folder.

> Note: Any Modbus or Profibus network that is connected to a T940/Visual Supervisor Instrument, which has been configured with an online port in the Networks folder, appears here.

1. Find the Server Computer section, and click Server Ports (4).
   This opens the current list of Ports on the Server Computers.

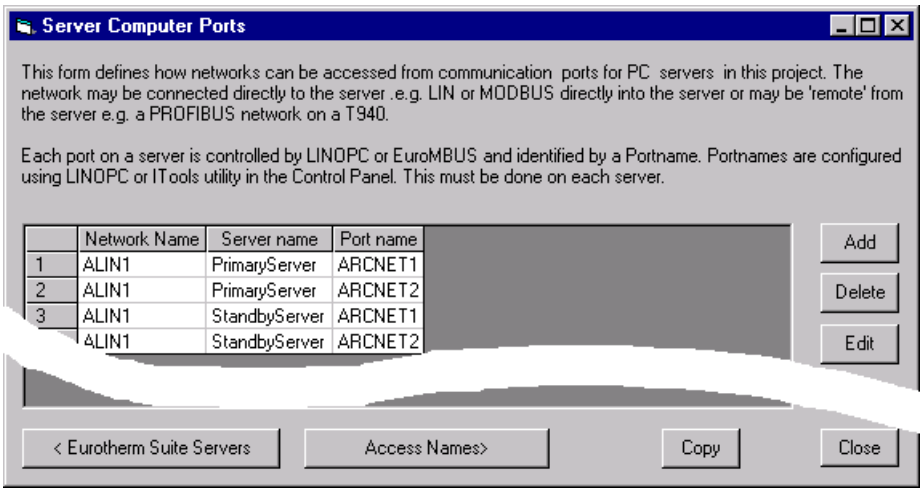


2. Configure the Server Ports.

   Add. Enter Network, Server and Port Names. Click Add Record.

   Delete. Removes the selected **Server Computer Port** records without requesting confirmation.

   Edit. Amends selected network records.



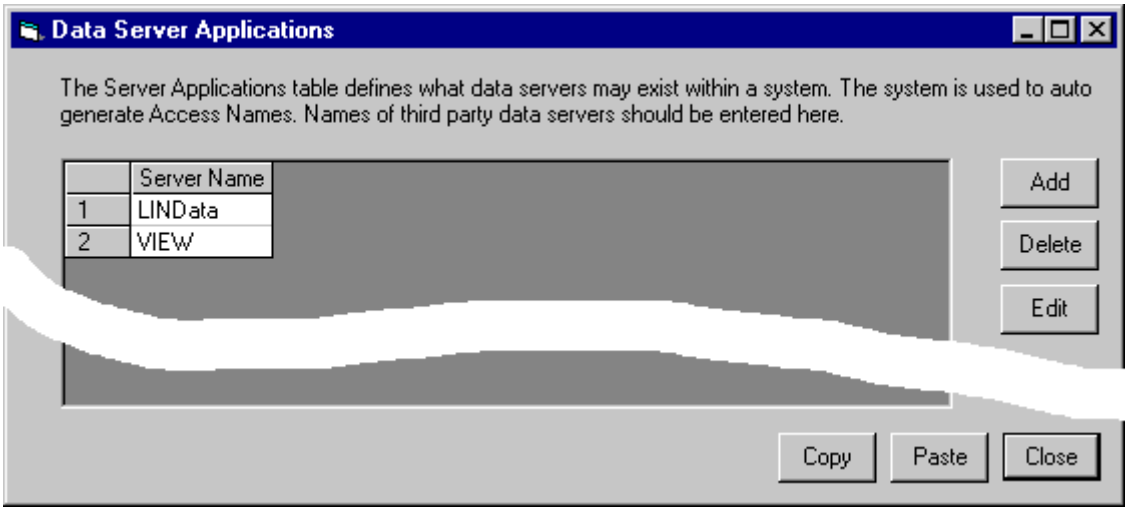
Network Name	The name of the Network that is connected to the Server via the Port name stated.
Server Name	The name of the Server configured in the Servers dialog box.
Port Name	The name of the Port that connects the Network to the Server. This name must match the port name(s) configured on the appropriate server via LINOPC or iTools.

3. Click Update Record to confirm changes.
4. Close Server Computer Ports dialog box.

19.1.5 Access Names

Access Names associate I/O Servers (such as LINData and VIEW) to InTouch graphical displays or the InTouch Tagname dictionary. This makes it easier to copy graphics between applications if the Access Name is not the same as that of the computer. To create 3rd party I/O server Access Names, the server applications must be added into the Data Server Applications table located in the Project Configuration.

Note: Refer to the Project Configuration instructions in this section.



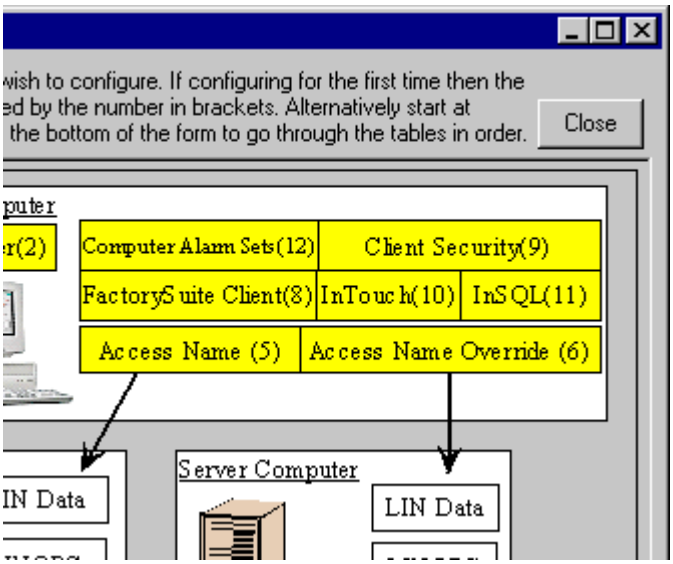
Each server must have an Access Name that has its own name in the Master Server Comp column and an empty Standby Server Comp column. These Access Names are used to monitor the health of LINOPC on those servers. It is recommended that, for the sake of clarity, the Access Name is the same as the Server Computer Name.

REDUNDANT ACCESS NAME

To provide redundancy for the InTouch graphics, an Access Name that uses both primary and standby server computers is required. As the data provider is called LINData, it is common to use the name LINData as a redundant Access Name. When a Tag is assigned to an InTouch graphic, this is the Access Name that should be used.

If there is only a single server, a separate Access Name can still be created (e.g. an Access Name LINData can be created that has the same Master Server Computer and blank Standby Server Computer). This provides an upgrade path for the addition of a second server in the future.

1. Find the Client Computer section, and click Access Names (5).
   This opens the list of current Access Names.

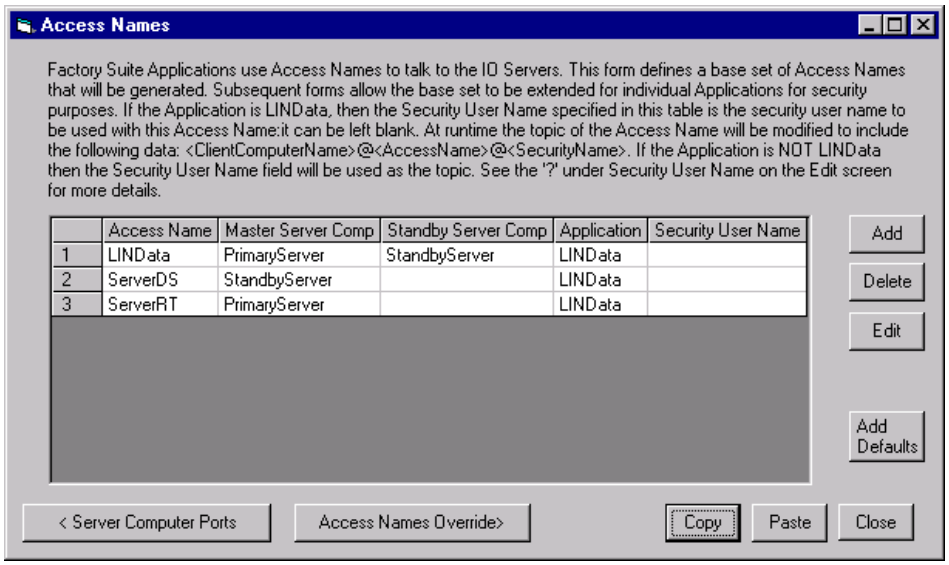


2. Configure the **Access Names**.

Notes:

1. To ensure Access Names appear in the InTouch Application, they must also be included in the InTouch Access Names table.

2. InTouch Alarms can be included in the Alarm banner only if an InTouch Access Name is configured in this table.



Add Enter Access Name, Master and Standby Server computers, Application and Security User Name. Click Add Record.

Delete Removes the selected Access Names records without confirmation.

Edit Amends Access Name records.

Add Defaults Automatically creates an Access Name for each server.

Access Name The name to be used for addressing this data.

Master Server Comp

The name of the Server with the selected FactorySuite Server Application resident.

Standby Server Comp

The name of an optional second Server with the selected FactorySuite Server Application resident.

Application select the name of the FactorySuite Server Application.

Security User Name This has two purposes:

LINData Applications, use the Security User Name to check if a write in the form AccessName:Tag.Field = value can be performed when written directly from InTouch.

3rd party Applications, used as the TOPIC name for that application.

3 Click Update Record to confirm changes.

Note: An Access Name should be added manually for use in the InTouch graphics to prevent the graphics having references to specific computer names.

4. Close Access Names dialog box.

19.1.6 Access Names Override

It may be necessary to force an InTouch node to get its data from a different server or pair of servers rather than the servers defined by the default Access Names. This may be the case if for example, two redundant pairs of servers (one pair serving five clients and another pair serving three other clients) wanted to use the same InTouch graphics (or the same generic Access Name). Since the graphics refer to a single Access Name (LINData), the configuration of that redundant Access Name must be overridden on a client by client basis.

1. Find the Client Computer section, and click Access Names Override (6).

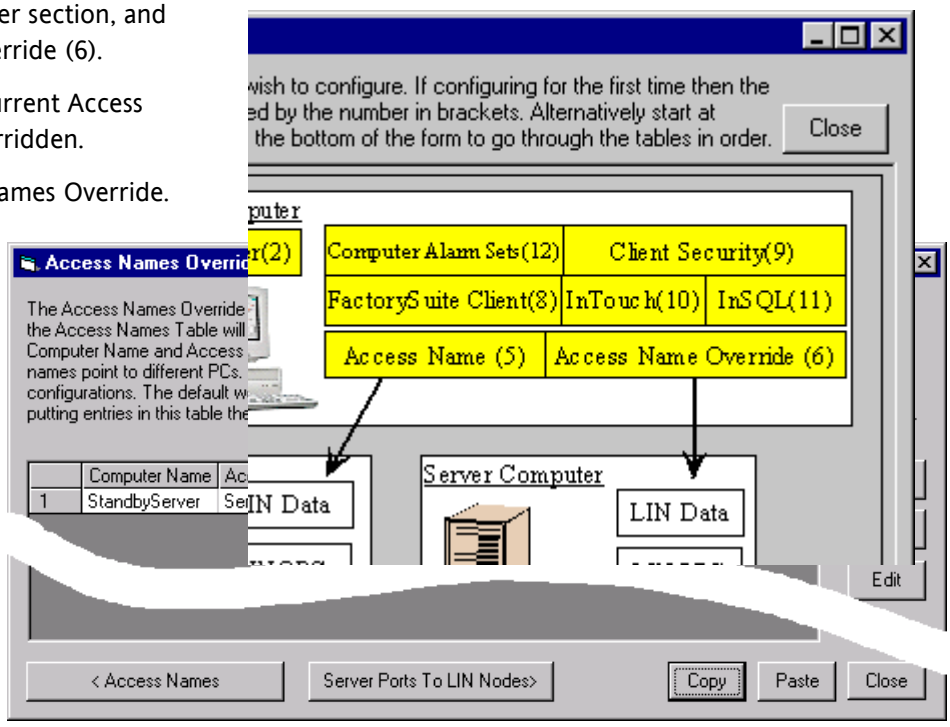
   This opens the list of current Access Names that can be overridden.

2. Configure the Access Names Override.

   Add. Enter Computer and Access Name, and Master and Standby Server Computers. Click Add Record.

   Delete. Removes the selected **Access Names Override** record without confirmation.

   Edit. Amends Access Names Override records.



Computer Name — Select the computer name of the Access Name you wish to override.

Access Name — Select the Access Name of the computer you wish to override.

Master Server Computer — Select the name of the Master Server.

Standby Server Computer — Select the name for the Standby Server.

3. Click Update Record to confirm changes, then close the 'Access Names Override' dialogue box.

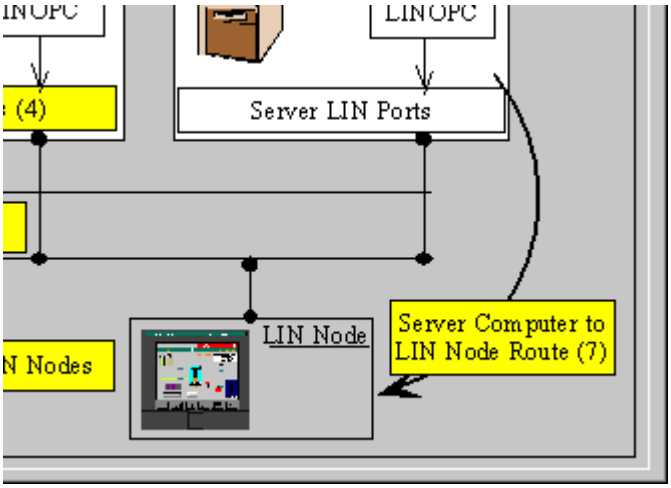
19.1.7 Server Ports to LIN Nodes

This is used to configure the loading of data between the ports on each server. If there are two Computer Arcnet cards on each server connected to the same ALIN network, there are two routes that the server can use to access the instruments connected to it. The user needs to decide how the loading of instruments is to be shared between those cards.

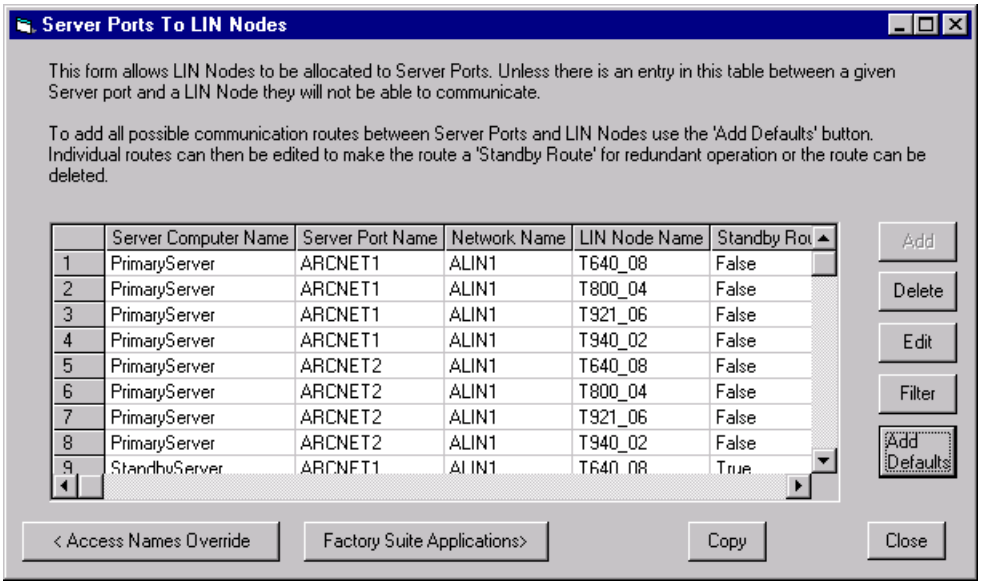
There should be only one primary route (Standby Route = False) for each instrument in this table, assigned to a primary server defined under 'Access Names'. There should be a corresponding entry with Standby Route = True for the standby server. This is required when Standby/No Standby Redundant Servers are configured and is used for LINOPC and the Alarm Provider.

Note: If a LIN Node can be accessed by more than one server, it must be ensured that one server is designated as the Standby route and the other is not.

1. Find the LIN Nodes section, and click Server Ports to LIN Nodes (7). This opens the list of current paths from Server to LIN Node that can be overridden.



2. Configure the Server Ports To LIN Nodes.



This graphic illustrates a Communicating Pair of servers as configured in the Server Computers table.

Add. Enter Server Computer, Server Port, Network and LIN Node Name, and Standby Route. Click Add Record.

Delete. Removes the selected Server Ports to LIN Nodes record without requesting confirmation.

Edit. Amends selected Server Port records.

Filter. Select categorised routes between the Server Computers and the LIN Nodes for display.

Add Defaults. Inserts all combinations of Server Ports to LIN Nodes records. See graphic above.

Server Computer Name
: Select the Computer Name derived from the Server Port table. ONLY editable if the filter option is set to LIN Nodes below the Network.

Server Port Name
: Select the Port Name derived from the Server Port table. ONLY editable if the filter option is set to LIN Nodes below the Network.

Network Name
: Select the Network Name derived from the Server Port table. This field cannot be modified.

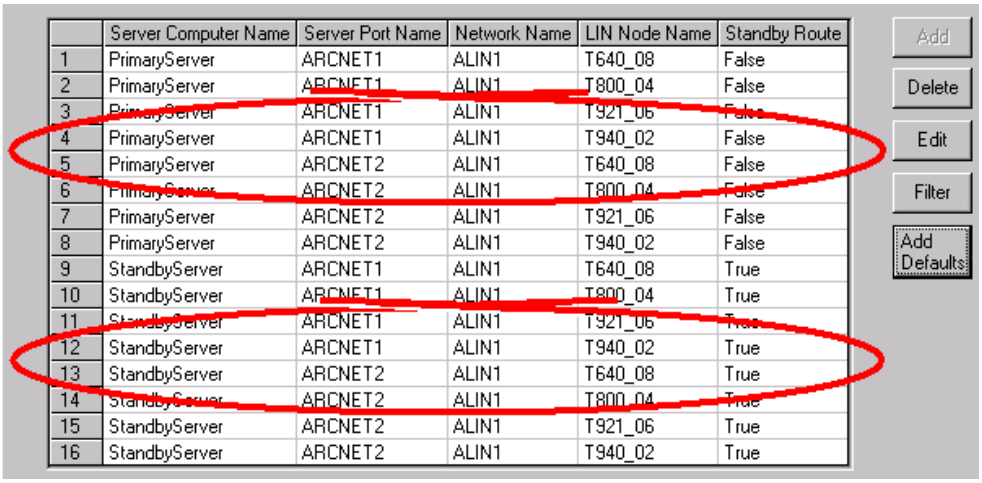
LIN Node Name
: Select the name of the instrument as displayed in the Network folder. ONLY editable if the filter option is set to LIN Nodes below the Server Computer Port or LIN Nodes below the Network.

Standby Route
: False = Primary Route for instrument to a primary server defined under Access Names. True = Standby Route for instrument to a standby server defined under Access Names.

3. Click Update Record to confirm changes.

DELETING SERVER PORTS TO LIN NODES RECORDS

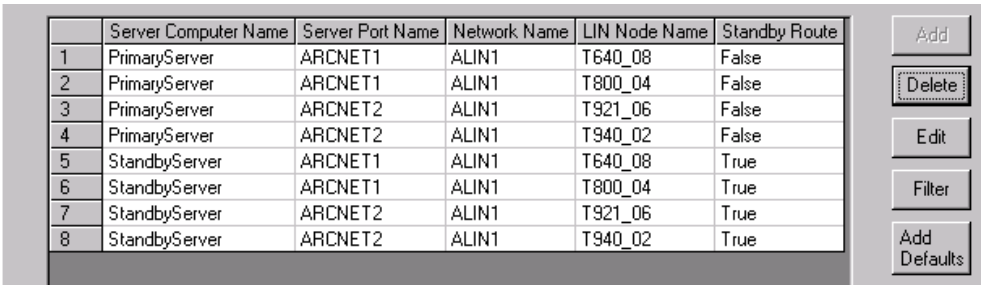
After using the Add Defaults button to insert all 'Server Ports To LIN Nodes' records the user should be aware that each instrument is communicating to both Primary and Standby Servers via both configured cards. Only a single route to each Server is required, and can be defined by deleting the unwanted communication routes.



	Server Computer Name	Server Port Name	Network Name	LIN Node Name	Standby Route
1	PrimaryServer	ARCNET1	ALIN1	T640_08	False
2	PrimaryServer	ARCNET1	ALIN1	T800_04	False
3	PrimaryServer	ARCNET1	ALIN1	T921_06	False
4	PrimaryServer	ARCNET1	ALIN1	T940_02	False
5	PrimaryServer	ARCNET2	ALIN1	T640_08	False
6	PrimaryServer	ARCNET2	ALIN1	T800_04	False
7	PrimaryServer	ARCNET2	ALIN1	T921_06	False
8	PrimaryServer	ARCNET2	ALIN1	T940_02	False
9	StandbyServer	ARCNET1	ALIN1	T640_08	True
10	StandbyServer	ARCNET1	ALIN1	T800_04	True
11	StandbyServer	ARCNET1	ALIN1	T921_06	True
12	StandbyServer	ARCNET1	ALIN1	T940_02	True
13	StandbyServer	ARCNET2	ALIN1	T640_08	True
14	StandbyServer	ARCNET2	ALIN1	T800_04	True
15	StandbyServer	ARCNET2	ALIN1	T921_06	True
16	StandbyServer	ARCNET2	ALIN1	T940_02	True

Add
Delete
Edit
Filter
Add Defaults

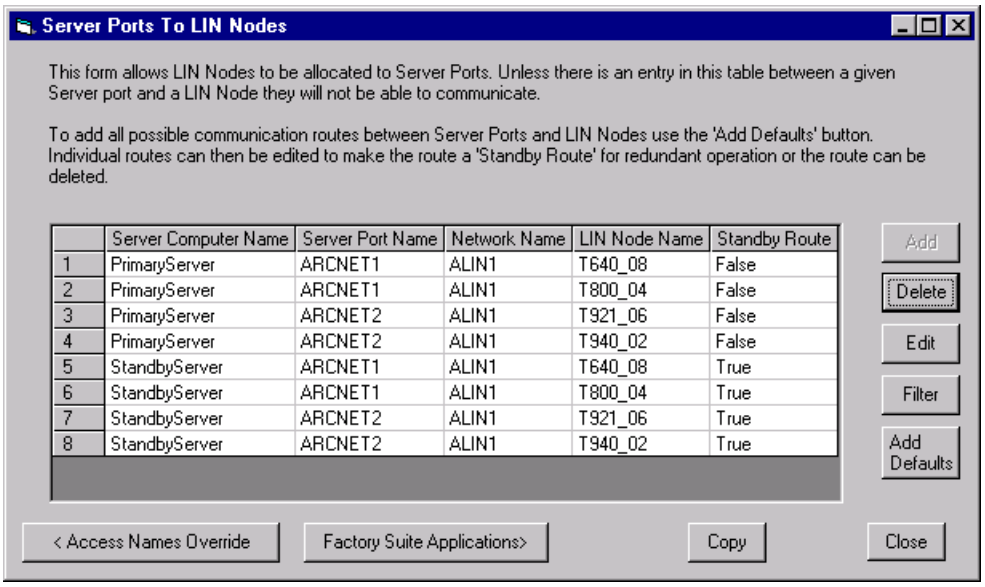
This is achieved by selecting a duplicated LIN Node record, and clicking the Delete button to remove the selected communication routes.



	Server Computer Name	Server Port Name	Network Name	LIN Node Name	Standby Route
1	PrimaryServer	ARCNET1	ALIN1	T640_08	False
2	PrimaryServer	ARCNET1	ALIN1	T800_04	False
3	PrimaryServer	ARCNET2	ALIN1	T921_06	False
4	PrimaryServer	ARCNET2	ALIN1	T940_02	False
5	StandbyServer	ARCNET1	ALIN1	T640_08	True
6	StandbyServer	ARCNET1	ALIN1	T800_04	True
7	StandbyServer	ARCNET2	ALIN1	T921_06	True
8	StandbyServer	ARCNET2	ALIN1	T940_02	True

Add
Delete
Edit
Filter
Add Defaults

4 Close Server Ports to LIN Nodes dialogue box.



19.1.8 FactorySuite Applications

This is used to select one of the three the Wonderware FactorySuite applications required in the Project. This information is used to create Access Names specific for those applications to use.

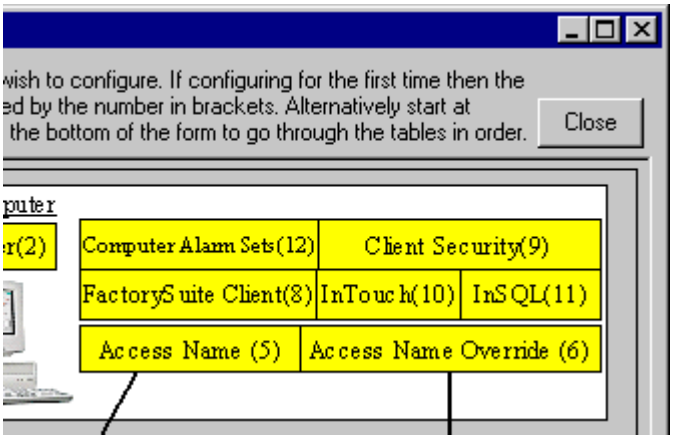
VIEW — The VIEW Application uses Access Names as configured in the Access Names table.

Recipe — For each Access Name configured in the Access Names table, there will be an additional Access Name with a post-fix of "_rcp". The Client Security table (described below) can be used to assign a security user for the recipe Access Names that will be used when InTouch recipes are downloaded using the InTouch RecipeLoad function.

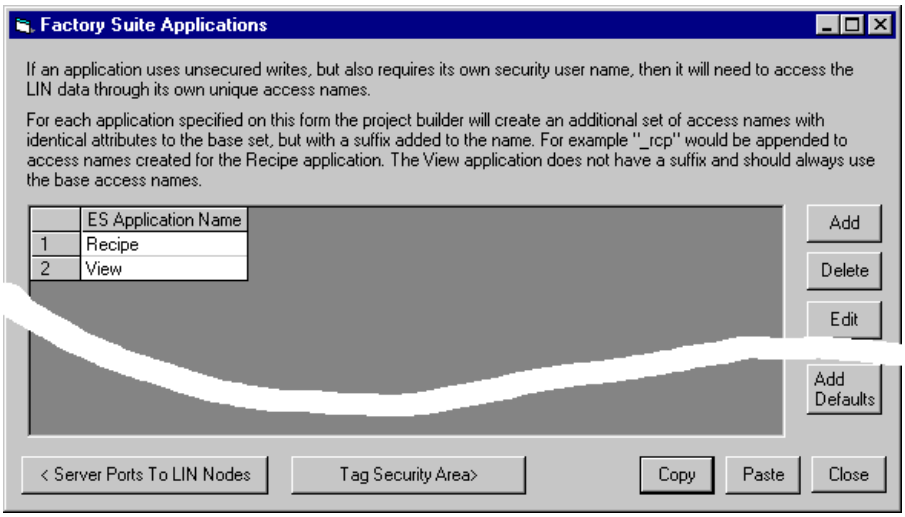
> Note: InTouch Recipe downloads (RecipeLoad) require that the items referred to in the recipe be active in Operations Viewer or in the InTouch Tagname dictionary. Operations Viewer recipe downloads (ZZRecipeload) have no such requirement so if the InTouch RecipeLoad function is not used, the Recipe Application is not required in this selection.

InSQL — This has no effect on Access Names and exists for future use.

1. Find the Client Computer section, and click FactorySuite Client (8). This opens the list of current FactorySuite Applications configured to operate in the Operations Viewer.



2. Configure the FactorySuite Applications.



Add. Enter the Factory-Suite Application to be run in the Operations Viewer Application. Click Add Record. (This should not normally need to change.)

Edit. Amends the name of the Operations Viewer Application to run in the Operations Viewer Application (This should not normally need to change.)

Delete. Removes the selected ES (Operations Viewer) Application record without requesting confirmation.

Add Defaults. Inserts Recipe and Operations Viewer Application Names to the records.

3. Click Update Record to confirm change, then close FactorySuite Applications dialogue box.

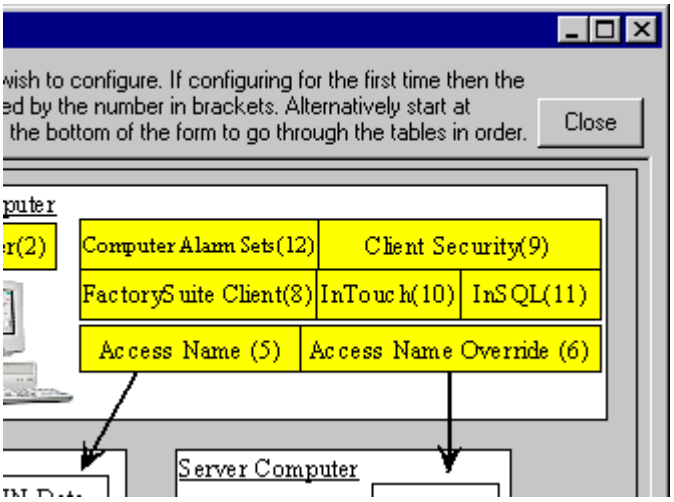
19.1.9 Client Security

This is used to assign a Security User Name to Access Names required by FactorySuite InTouch recipes for using the RecipeLoad function. Without a Security User Name assigned to the Access Names used in the recipe, the download will fail. This should not be required if the supplied EurothermSuite data entry wizards and quick functions are used.

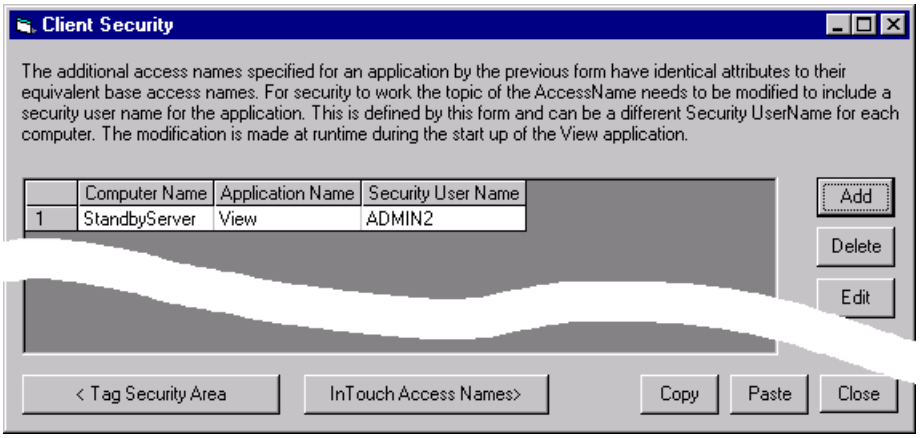
Like the Security User Name used in the Access Names table, this is where the Security User Name assigned to an Access Name can be overridden on a Computer by Computer basis.

> Note: For 3rd Party Access Names, the SecurityUserName is the Topic part of the DDE connection string. This allows the topic to be different for a given AccessName on a given Computer.

1. Find the Client Computer section, and click Client Security (9). This opens the list of current Applications running in the system and the associated User Id configured to operate.



2. Configure the Client Security.



   Add. Enter the Computer Name, FactorySuite Application Name and Security User Name. Click Add Record.

   Edit. Amends selected Client Security records.

   Delete. Removes the selected Client Security record without requesting confirmation.

Computer Name	The name of the computer, as configured in Server Computer or Client Computer section, Computer(2), operating the selected FactorySuite Application.
Application Name	Specify the FactorySuite Application you wish to operate at the selected Computer Name.
Security User Name	Specify a User Name (configured in Security Manager) required to use the FactorySuite Application at the selected Computer Name.

3. Click Update Record to confirm changes, then close the Client Security dialogue box.

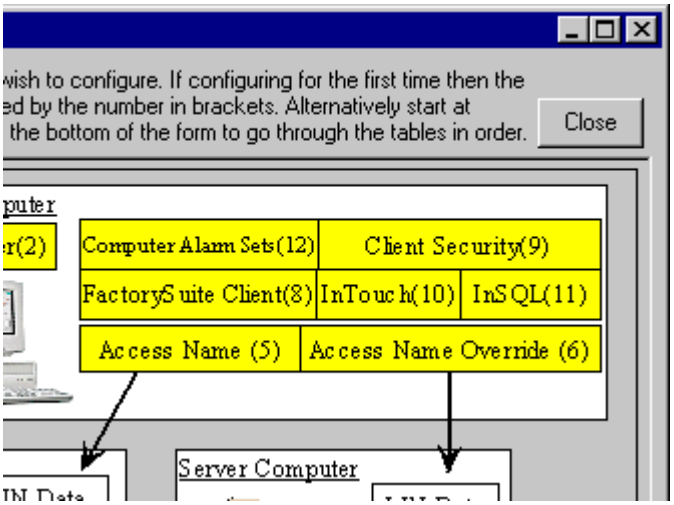
19.1.10 InTouch Access Names

This is used to define which Access Names are created in the InTouch Application and which server alarms (of the alarm generating servers) will be displayed in the alarm banner on each FactorySuite Application.

Note: To ensure Access Names appear in the InTouch Application, they must also be included in the InTouch Access Names table described above.

Note
Refer to the Access Names instructions in this section.

1. Find the Client Computer section, and click InTouch (10). This opens the list of currently configured FactorySuite Applications and shows whether Alarms generated from server are displayed in Operations Viewer Alarm banner.



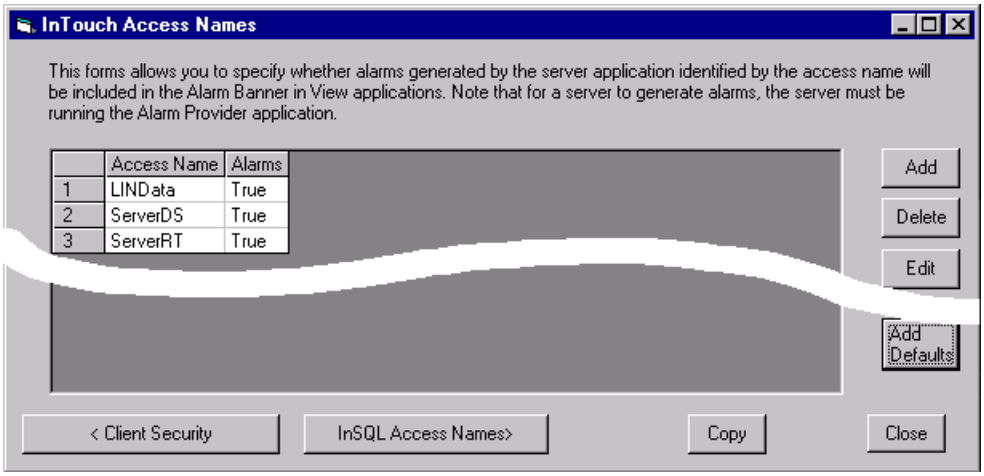
2. Configure the InTouch Access Names.

Only entries in this table will be created in the InTouch Application.

Note: Use the Add Defaults button to update the window with the relevant configured data.

Add. Enter the Access Name, and Alarms (True/False). Click Add Record.

Delete. Removes the selected InTouch Access Names record without requesting confirmation.



Edit. Amends selected InTouch Access Names records.

Add Defaults. Inserts current InTouch Access Names to the records.

Access Name	select the name that FactorySuite Application uses to access the server.
Alarms	True = Alarms generated from server are displayed in Operations Viewer Alarm banner, False = Alarms generated from server are not displayed in Operations Viewer Alarm banner.

Click Update Record to confirm changes, then close InTouch Access Names dialogue box.

19.1.11 InSQL Access Names

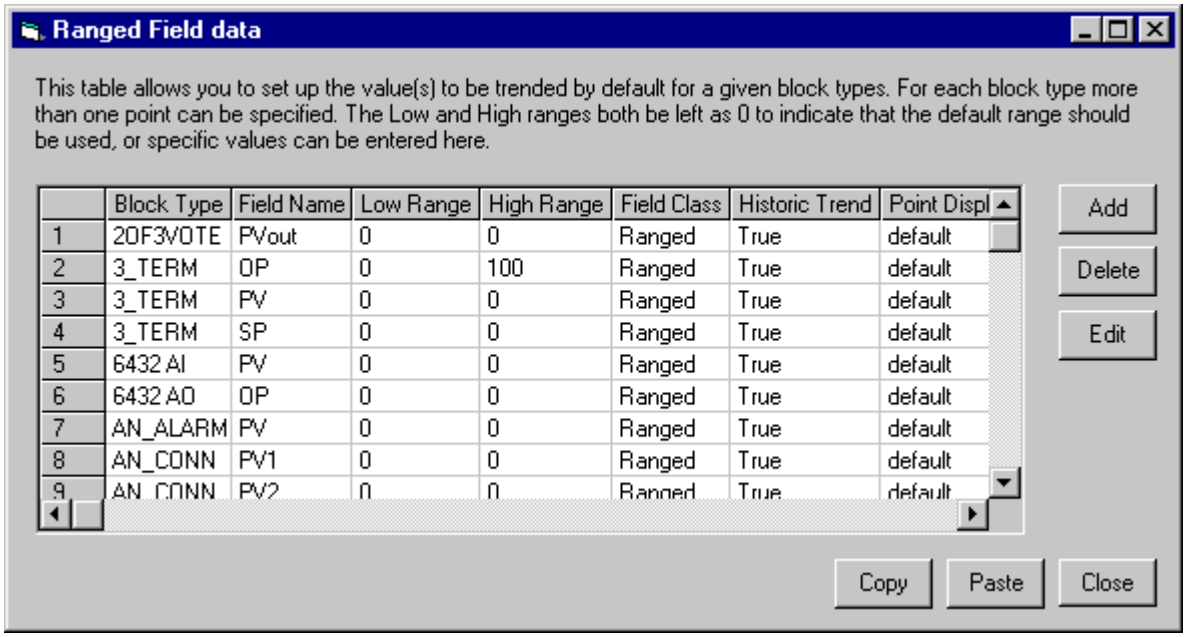
InSQL does not use Access Names. This table is used to define which instruments should be exported for trending by InSQL according to the selected Access Name.

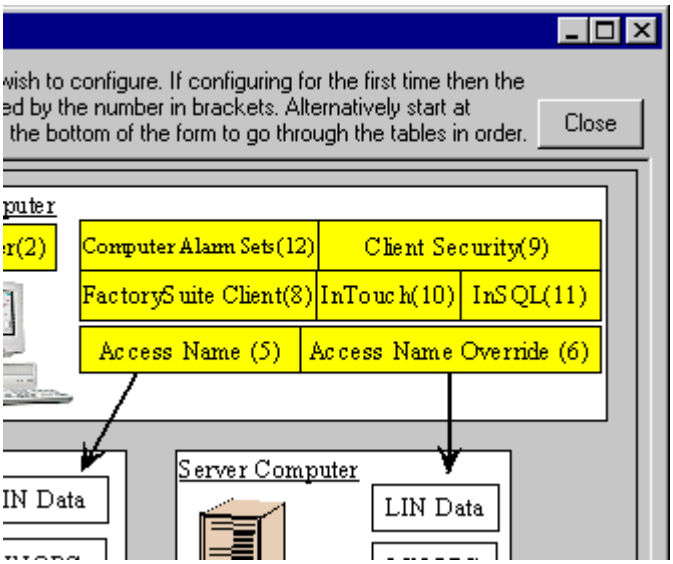
This is used to define a Computer operating the InSQL Application and the Access Name required for use. It generates files required to Trend LIN block fields in Wonderware Industrial SQL server. The files are stored in

<Project>\FactorySuite\Clients\InSApps\ <computer name>

The files generated are InTouch Tagname dictionary files that contain all the InSQL Tags corresponding to each LIN block that has been selected as InSQL Trended. To observe or edit Trended LIN block type fields, select

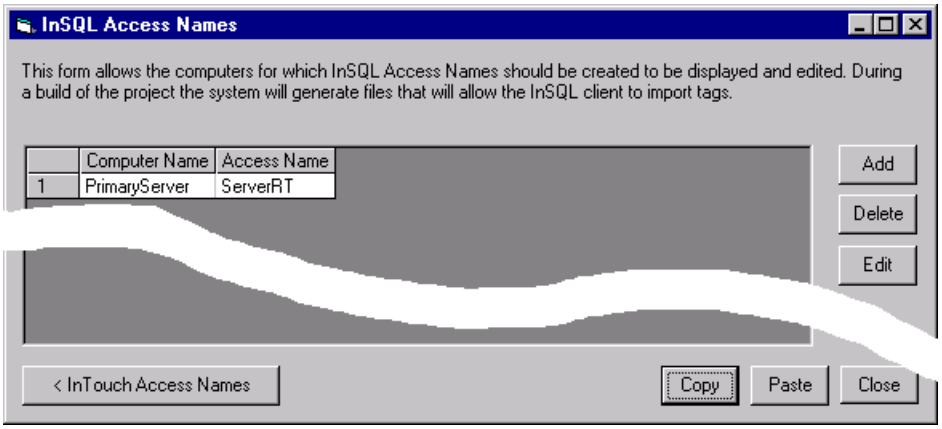
Project Configurator/Project Configuration/TagTrendData





1. Find the Client Computer section, and click InSQL (11). This opens the list of currently configured InSQL Computer Names and associated Access Names.

2. Configure the INSQL Access Names.



Add. Enter the Access Name, and Alarms (True/False). Click Add Record.

Delete. Removes the selected InSQL Access Names record without requesting confirmation.

Edit. Amends selected InSQL Access Names records.

Add Defaults. Inserts current InSQL Access Names to the records.

Computer Name	Select the client computer name of the computer that the InSQL Application uses to access the server.
Access Name	Select the Access Name of the computer you wish to use to operate InSQL.

Note: The Access Name is not used by INSQL. It is only a means of selecting the server for which data will be exported. Only data accessible by that server (via Server Ports to LIN Nodes) will be exported.

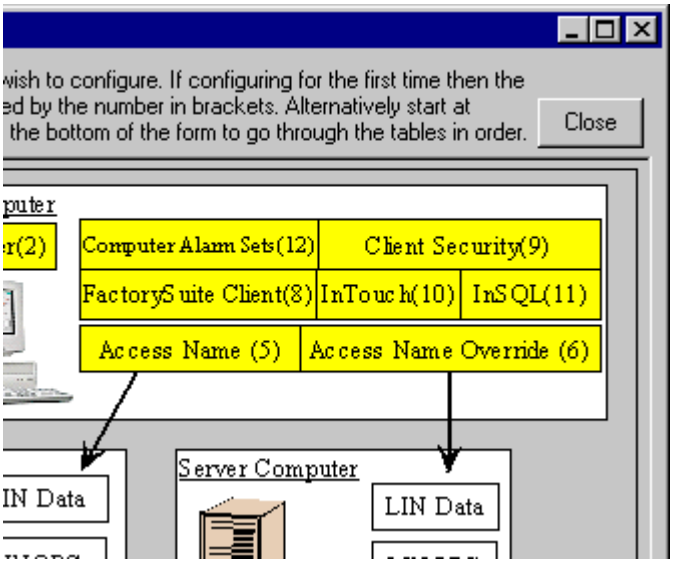
3. Click 'Update Record' to confirm changes, then close the InSQL Access Names dialogue box.

19.1.12 Computer Alarm Views

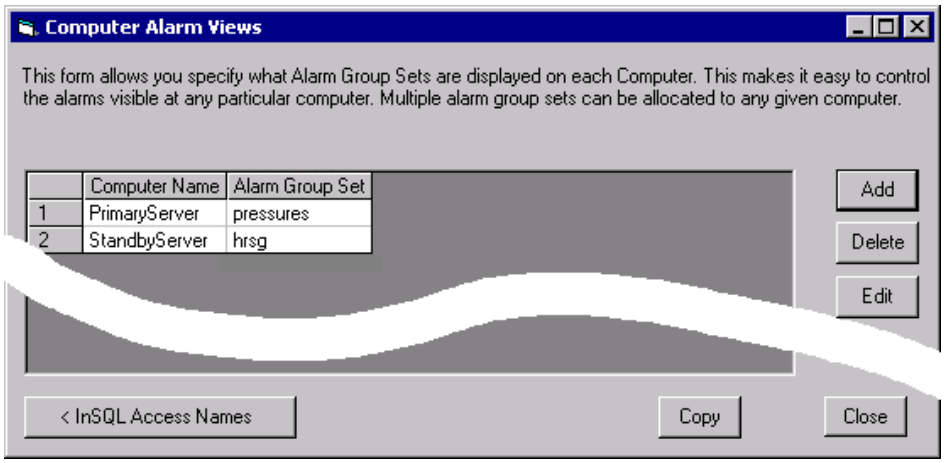
Note: These parameters are now configured using the Project Organiser, Alarm Groups Sets and Alarm Views in the Computers Folder, please refer to the Project Organiser Help File for full instructions.

This is used to select an Alarm Group Set to indicate the source of an Alarm, and an associated Supervisory Computer for displaying that alarm.

1. Find the Client Computer section, and click Computer Alarm Sets (12). This opens the list of current Computer Alarm Views.



2. Configure the Computer Alarm Views.



Add. Creates a Computer Alarm View record. Select a Computer Name. Select an Alarm Group Set. Click Add Record.

Delete. Removes the selected Computer Alarm View record without requesting confirmation.

Edit. Amends selected Computer Alarm View record.

Computer Name

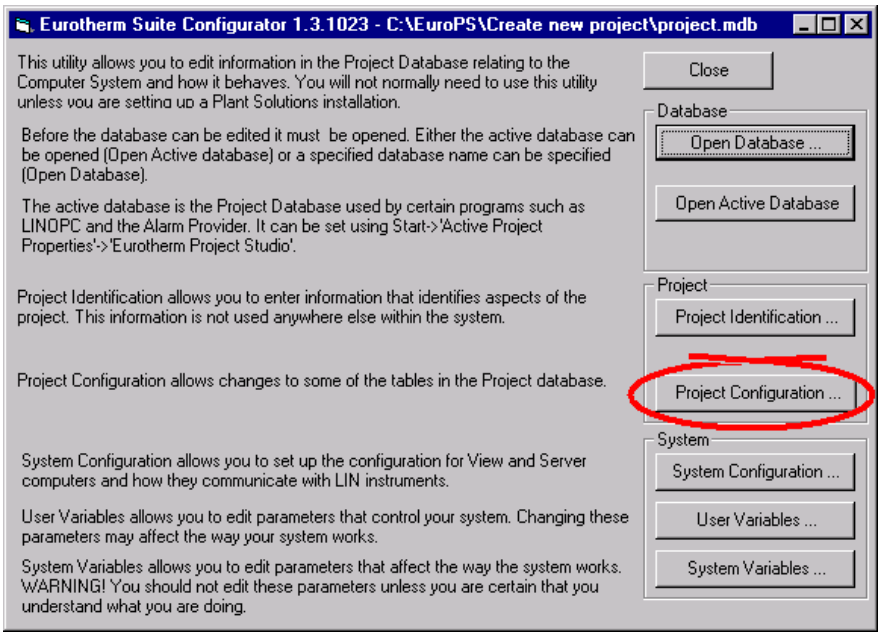
Select the name of the computer to display alarms occurring in the selected Alarm Group Set, see below.

Alarm Group Set Select the Alarm Group Set to display alarms on the selected computer, see above.

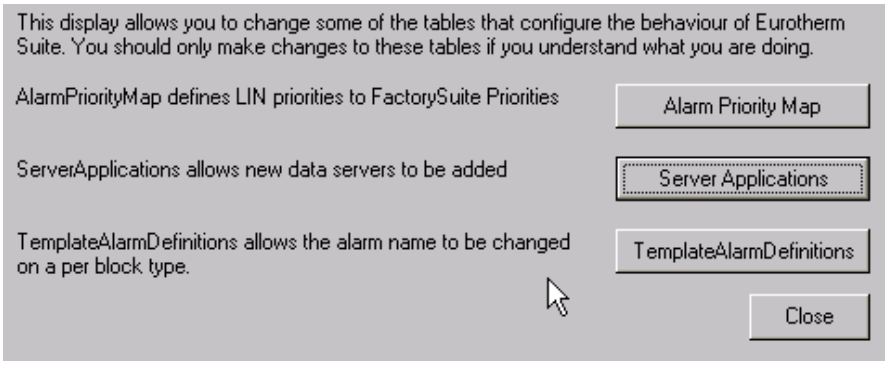
3. Click Update Record to confirm changes, then close the Computer Alarm View dialogue box.

19.2 PROJECT CONFIGURATION

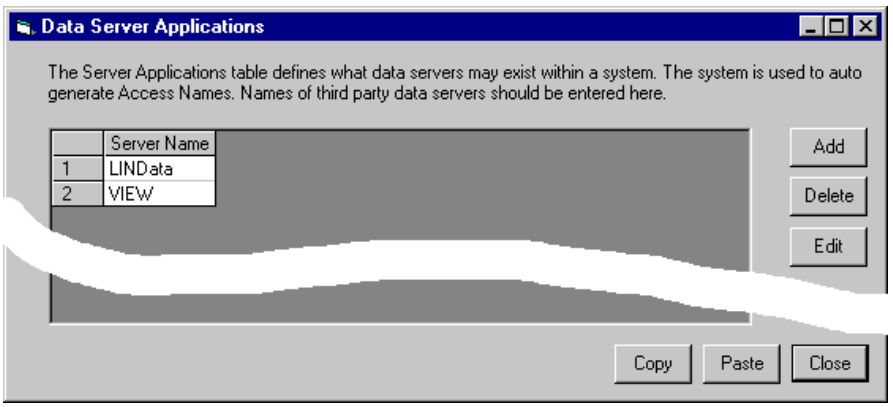
1. Click Project Configuration. This opens the Project Configuration dialogue box.



2. Click Server Applications. This opens the Data Server Applications dialogue box enabling 3rd party I/O Server Access Names to be created.



3. Configure Data Server Applications.



   Add. Enter the name of a Server Application used in FactorySuite. Click Add Record.

   Edit. Amends selected Server Name records.

   Delete. Removes the selected Server Name record without requesting confirmation.

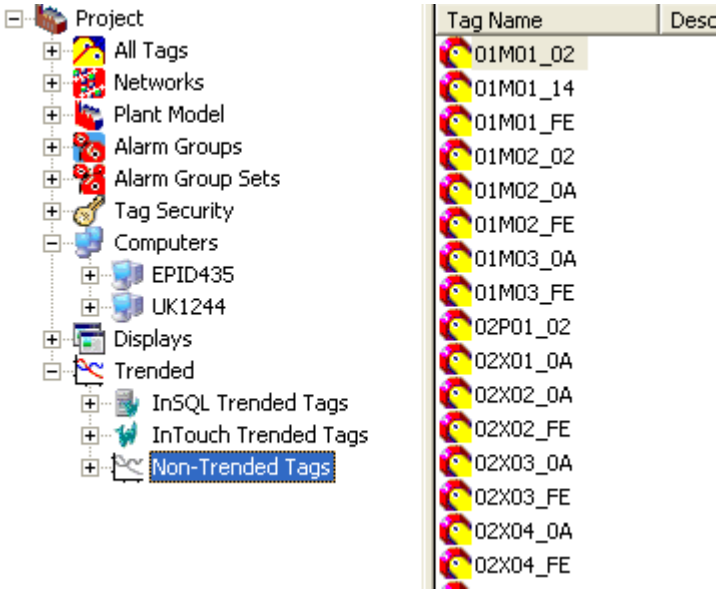
   Server Name. Enter name for the selected Server Application.

4. Click Update Record to confirm changes, then close the Data Server Applications dialogue box.
5. Close Project Configuration.
6. Close Project Configurator.

20 CONFIGURING TRENDED TAGS

Each of the Trended folders is configured simply by populating it with the Tags that are to be used in a Trend. Each Trended folder is used to identify the Tags that are to be recorded within either the InSQL Server or the InTouch Server. Any Tags can be allocated, but only Tags specifically used for Trend purposes will operate correctly.

1. Assuming that Project Organiser has remained open, select the Non-Trended Tags Folder to show all Tags that are not currently used by either of Servers.
2. Select the Tag, drag it from the Non-Trended Tags Folder and drop it in the required Server folder.



Notes:

1. Additional information is available on the Properties dialog for the InSQL Trended Tags folder.
2. Always Build from the Project folder down to the I/O Instrument Folder, or use the Full Project Build in Project Organiser (Project > Full Project Build).
3. Refer to the Project Organiser Help File for full instructions.

21 BUILDING THE InTouch APPLICATION

To ensure that all relevant information held in the Project database is accessible to the InTouch Application, use the Wonderware Build button from the Application toolbar, or the Project > Full Project Build command. This automatically builds the entire Project creating the Access Names configured using the Project Configurator (if used)

Project Configurator > System Configuration > InTouch Access Name (11)

and the InTouch Trended Tags corresponding to Tags as defined in the LIN Block fields configured using the Project Configurator (if used)

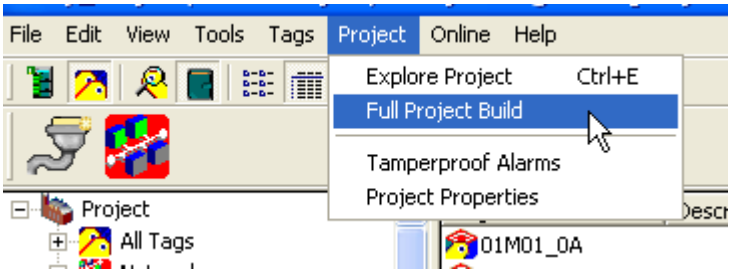
Project Configurator > Project Configuration > Ranged Field data

The build does not delete InTouch Tags, but it does inform the user if any Tags in the InTouch Tagname dictionary were not generated on that build. This can be used to determine any Tags that may need to be deleted manually. Similarly, the Build does not delete Access Names. Any Access Names that are not required to be deleted from InTouch WindowMaker manually.

> Note: The Build creates all Tags and does not consider your InTouch Tag license limit. If the number of Tags exceeds the user's InTouch Tag license limit, the InTouch Application will fail to open. To open the InTouch Application and delete the excess Tags, a bigger license must be obtained (a temporary license can be obtained for this operation, if required).

BUILD THE PROJECT

1. Assuming that Project Organiser has remained open, select the Project folder.
2. Launch the Wonderware Build by pressing the relevant icon,  , in the Application toolbar (Project > Full Project Build). The Wonderware build button turns green after a successful Build process.



> Note: Ensure InTouch WindowMaker and WindowViewer are not running when building the Project, otherwise errors will occur.

21.1 InTouch LICENSE

The InTouch license is required to:

1. Run InTouch WindowMaker (Development system, DS).
2. Run InTouch WindowViewer (Development system, DS or Runtime system, RT).
3. Control the number of InTouch Tags allowed in the InTouch Tagname dictionary.

The InTouch License Utility is located under

Start > Programs > … > License Utility, where '…' denotes the InTouch installation path.

An InTouch Development license is required for any Computer that acts as an InTouch Development Station and also to allow such a Computer to act as an InTouch View Station (Operations Server).

An InTouch Runtime license is required for Computers that act solely as InTouch View Stations (Operations Server).

The InTouch license is available in two sizes: 1000 and 60 000 Tags. These are mapped onto the size of the LINOPC license. Licenses up to and including 300 Operations Viewer Blocks include a 1000 Tag InTouch license. Licenses above 300 Operations Viewer Blocks include a 60 000 Tag InTouch license.

To determine the license required, consider

1. The InTouch Application uses approximately 700 InTouch Tags (this may vary according to the InTouch Application version). The remaining 300 Tags are available for use as InTouch Trend Tags.
2. When a LIN Block Tag is trended using the developer tools, the Project build, automatically creates an InTouch supertag for each Trended LIN Block. The supertag accounts for 1 entry in the InTouch Tag license. Each Trended field accounts for one additional entry in the InTouch Tag license, for example, a Trended PID block, uses four InTouch Tags entries (Supertag – the PID block name, plus one per PV, OP, SP). A Trended analogue input block, uses two InTouch Tags entries (Supertag – the Input block name, plus one per PV).
3. A Trended Field Tag, accounts for only one InTouch Tag entry.
4. If the user's InTouch Application requires any InTouch Tags for custom logic or other 3rd party I/O communications this will require the 'InTouch Runtime with I/O' license.

The number of LIN Blocks that need Trending and the corresponding number of InTouch Tags required to achieve this can be estimated using the above points. If the number of InTouch Tags is close to or greater than 300, a 60 000 InTouch Tag license (LINOPC + InTouch) is required. The minimum InTouch Tag license that provides 60 000 InTouch Tag is a 1000 LIN Block LINOPC license.

21.1.1 Installing an InTouch License

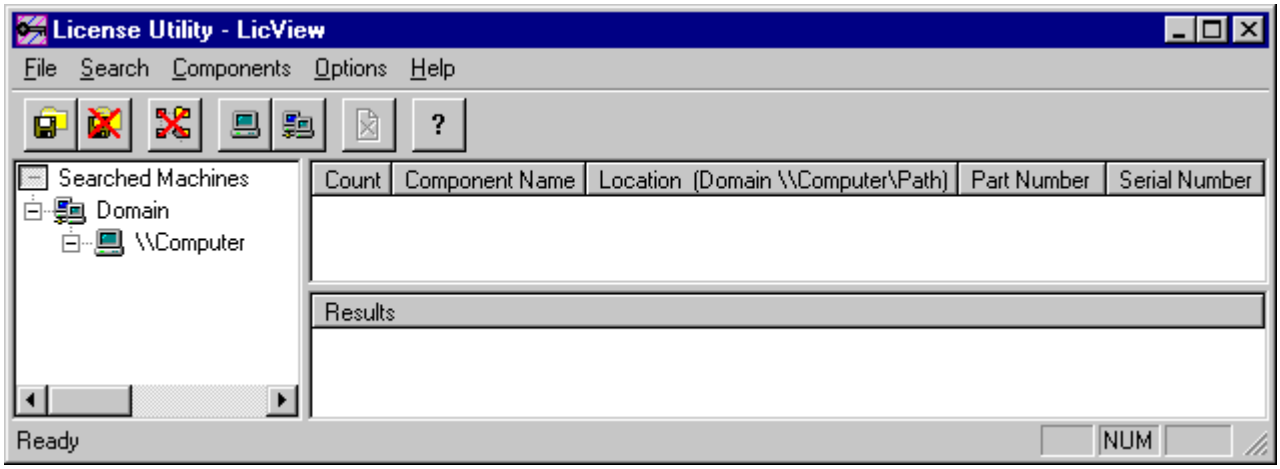
Note: Refer to the License Utility Help File for full instructions.

Open the InTouch license Utility.

Start > Programs > ... > License Utility, where '...' denotes the Wonderware installation path.

This opens the InTouch license wizard.

Use the Help File for instructions

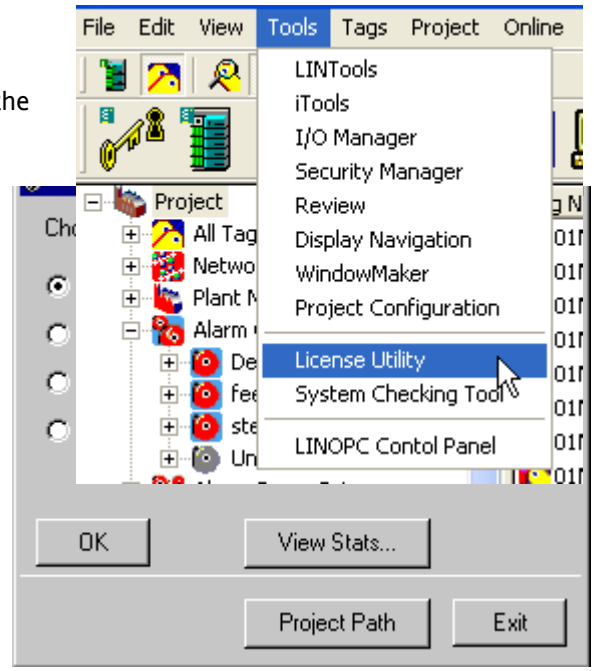


21.1.2 Requesting an Operations Viewer License

This License (ulicense.ujl) is required to authorise the use of Operations Viewer software.

1. Open the Operations Viewer license Utility.

   Start > Programs > ... > License Utility, where '...' denotes the Wonderware installation path. This opens the License wizard.



2. Select the required License Utility mode.

   Create New License. Required for new Project.

   View / Update Current License. Required for changing License package request details.

   Restore License From File. Required for locating and restoring an existing license (or backup copy).

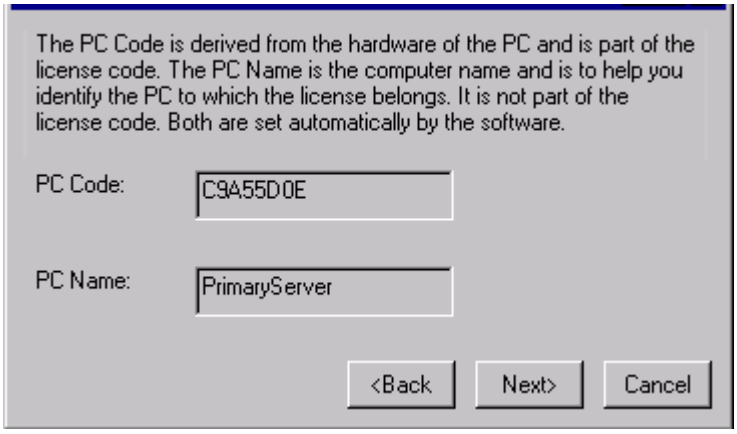
   Create a Temporary License from a File. Required for running the system for 72 hours. Created from an existing backup license and must be acknowledged within five minutes of every hour.

   The 'View Stats' button displays the Operations Viewer and OPC system Block usage.

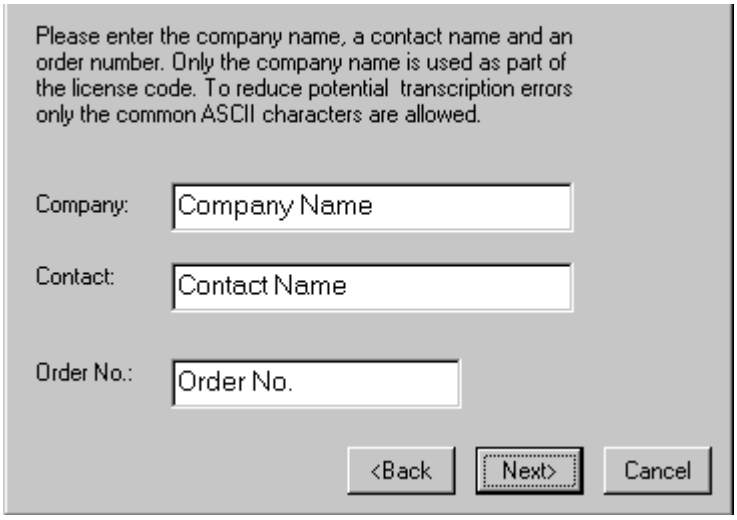
   Press 'Project Path' to view/edit the path for the Default Project.

3. Press OK to continue.

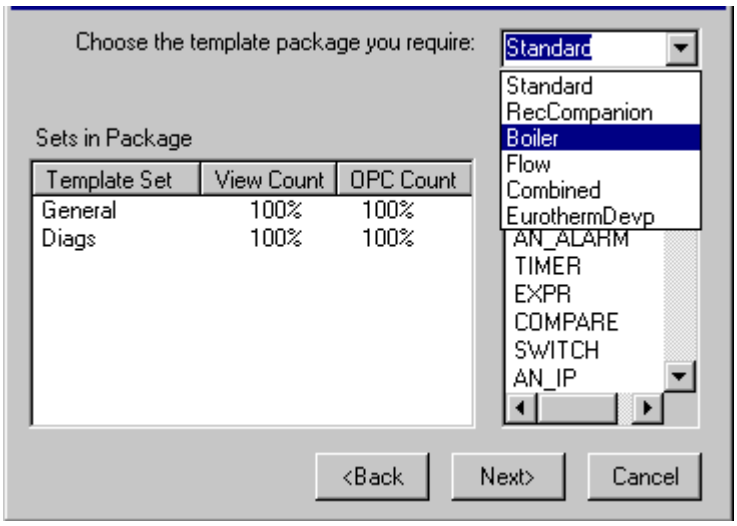
4. Observe the PC Code and PC name and press 'Next' to continue.



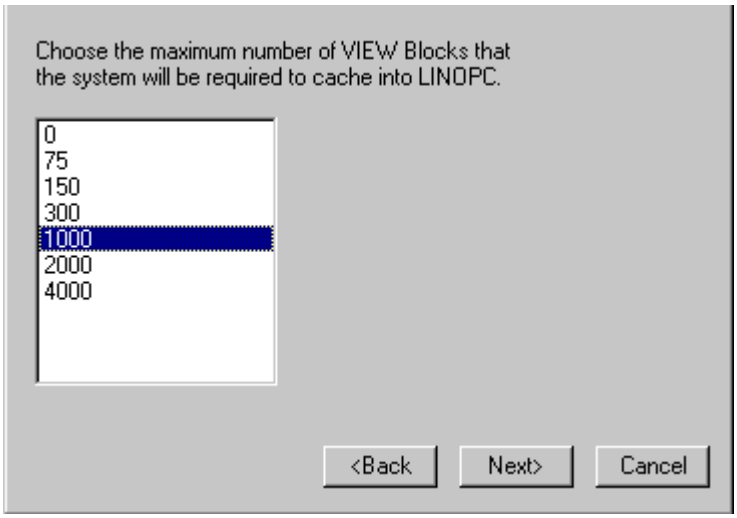
5. Enter the Company contact and Order Number details. And press 'Next' to continue.



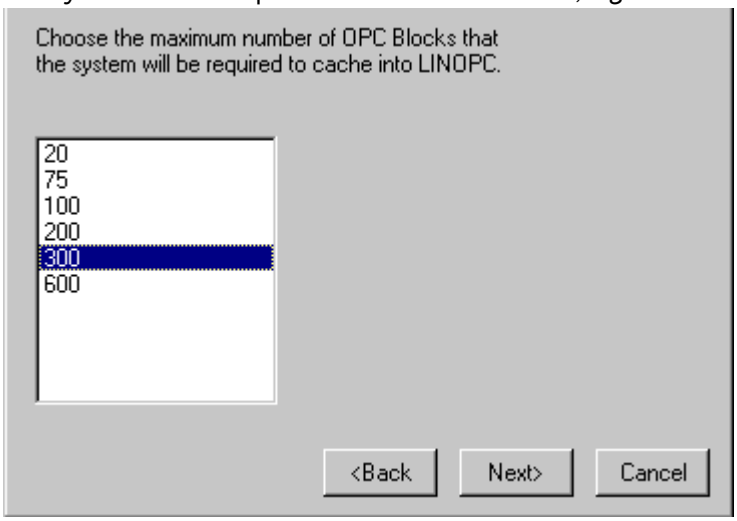
6. Choose the required Template Package from the drop-down menu. Press 'Next' to continue.



7. Select the maximum number of Operations Viewer Blocks the system will be required to cache into LINOPC. Press 'Next' to continue.



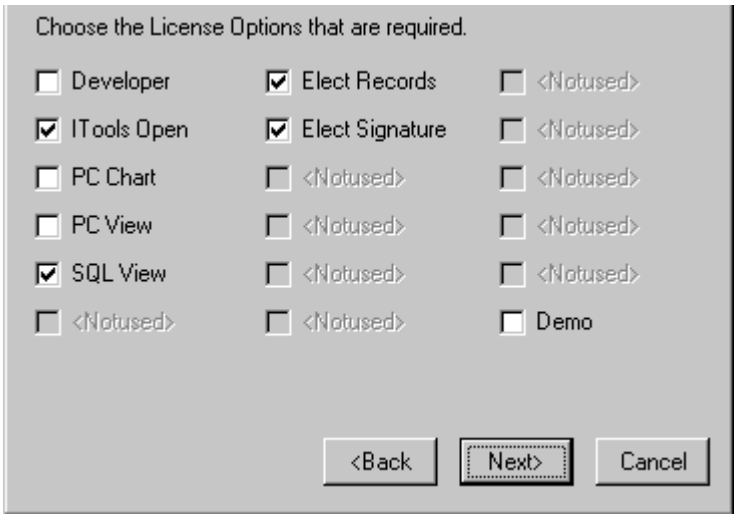
8. Select the maximum number of OPC Blocks the system will be required to cache into LINOPC, e.g. blocks cached from a third-party application.
Press 'Next' to continue.



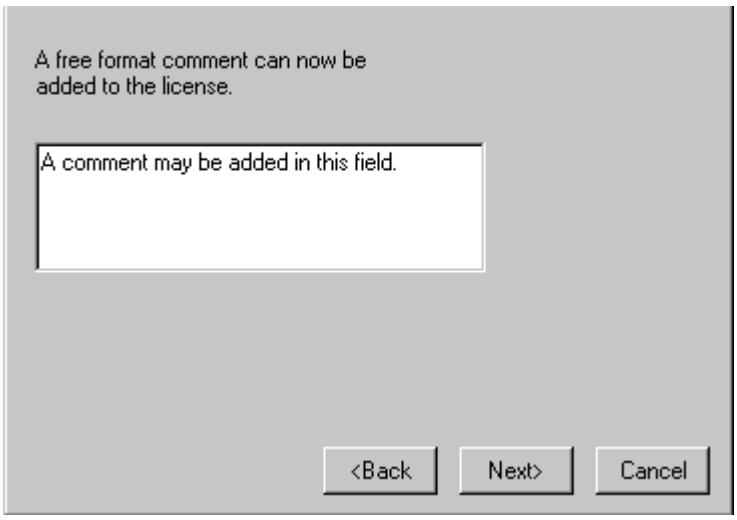
9. Select the License Options required.

> Note: Selecting Elect Records and Elect Signature options offer full Audit Trail and functionality required for 21 CFR Pt 11 compliance.

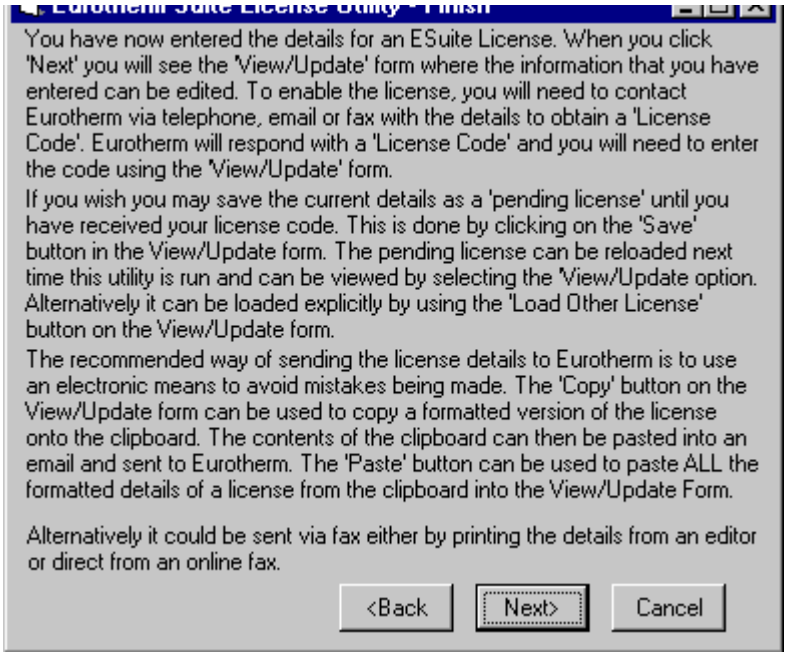
Press 'Next' to continue.



10 Enter a comment, if desired.
Press 'Next' to continue.

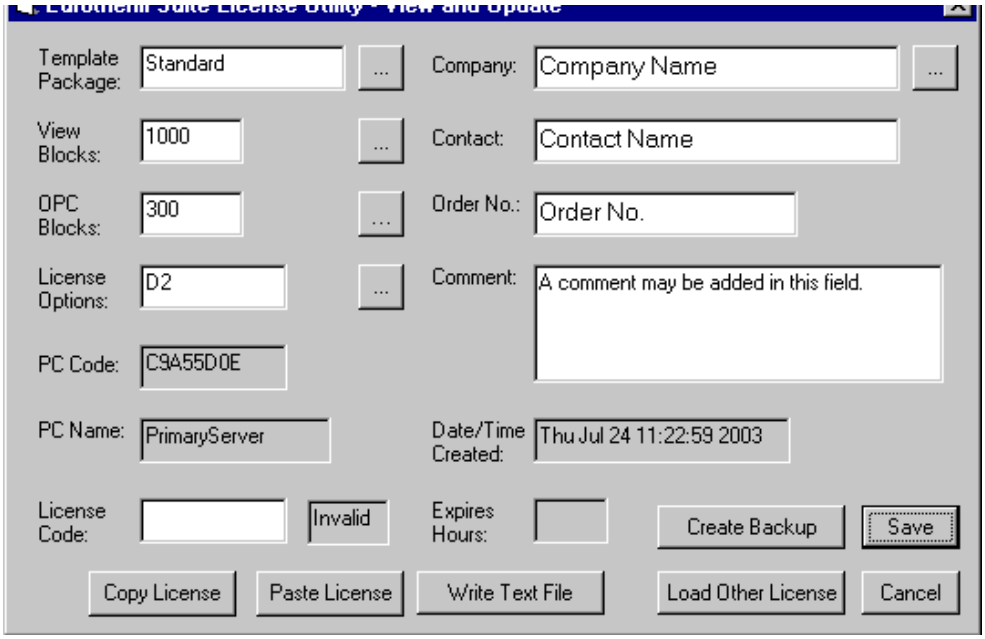


11. Important.
    Read the information in this dialogue box.
    Press 'Next' to continue.



12 Select ... to view and update License Package options.

13. Amend Contact and Order No. details as required.



Copy License. Duplicates License details to the Computer clipboard.

Paste License. Inserts all copied License details.

Write Text File.
Converts License details to a .txt format to request License from the email address supplied.

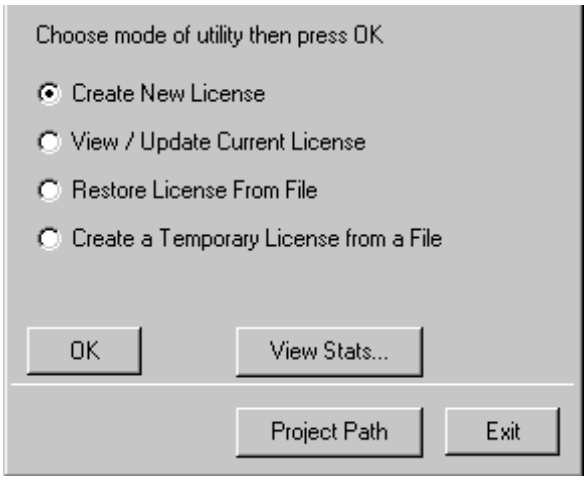
Load Other License. Enable the selection of the most recent Saved Licenses.

Create Backup. Saves a copy of the final License agreement.

Save. Saves all License data. May be used pending a License Code, ready for retrieval later.

Cancel. Ignores all License data included since last save.

14. Press ☒ to close the View and Update dialogue box.
15. Press 'Exit' to close the License Utility.



22 CONFIGURE DISPLAY NAVIGATION

The Display Navigation is based around Display Blocks as opposed to mimics. A Display Block allows you to assign other features along with the mimic name: -

Security Level	Defines the level of security a user requires to view the selected Display Block. This corresponds to the Display Access Level Access Rights configured in Security Manager (0 to 9999).
Process Cell Display	Defines which display blocks appear in the Process Cell list in Operations Viewer providing easier navigation to the main process displays.
Process Cell Page	Defines the display block displayed in Operations Viewer when the Process Cell button is selected.
Alarm History Page	Defines the Alarm Group historical alarms displayed in Operations Viewer when the Alarm History button is selected.

Caution

When using Windows XP Operating System, the Windows Classic Theme must be configured. Failure to do so may result in the intermittent malfunction of the Alarm History page in the Operations Viewer. To select Windows classic:
Right-click the Windows Desktop to reveal the context menu, and select 'Properties'. The Display Properties dialogue appears. Click the Theme tab and select Windows Classic from the drop-down menu. Press OK to confirm changes.

Trend Page	Defines the Trend displayed in Operations Viewer when the Trend button is selected. In addition, the Display Block requires the user to define the destination when operating the up, down, previous and next navigation in the Operations Viewer.

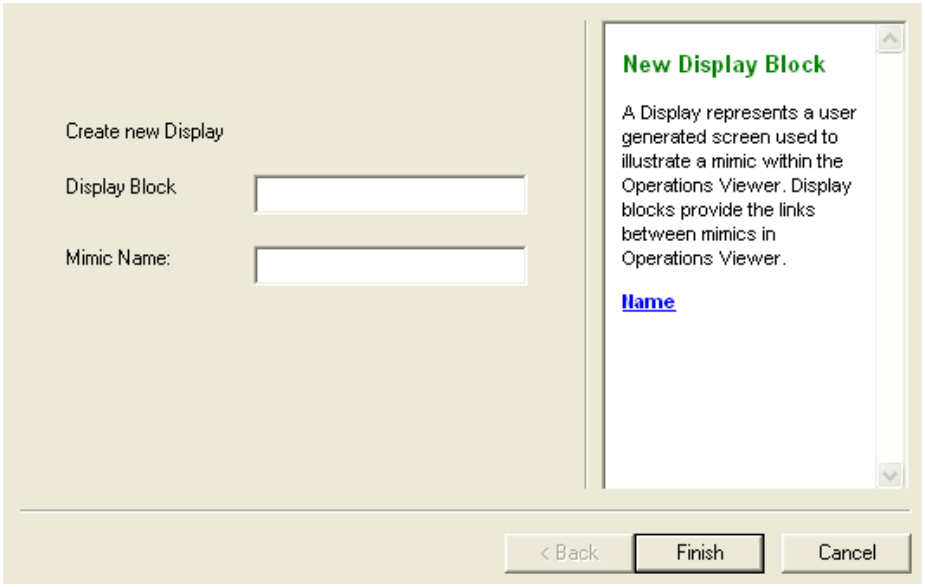
Note: If different navigations are required for different Computers a unique set of Display Blocks must be configured for each Computer, including the Overview.

22.1 CREATE A DISPLAY BLOCK

Note: Display Blocks can also be created from WindowMaker, which is the application used to generate the user display, shown via the WindowViewer on the Operations Viewer.
To create specialised user displays, refer to the WindowMaker help.

1. Assuming that Project Organiser has remained open, select the Displays folder.

2. Create a Displays Block by launching the New Display Block wizard (File > New Display Block or click on  button).



Each Display Block represents a screen created using the WindowMaker Application, and shown on a configured Operations Viewer.

Note: An 'Overview' Display block is automatically generated and configured, when the New Project wizard is completed.

3. The New Display Block Wizard starts - follow the instructions shown on each page of the wizard, then press 'Finish'.

Notes:

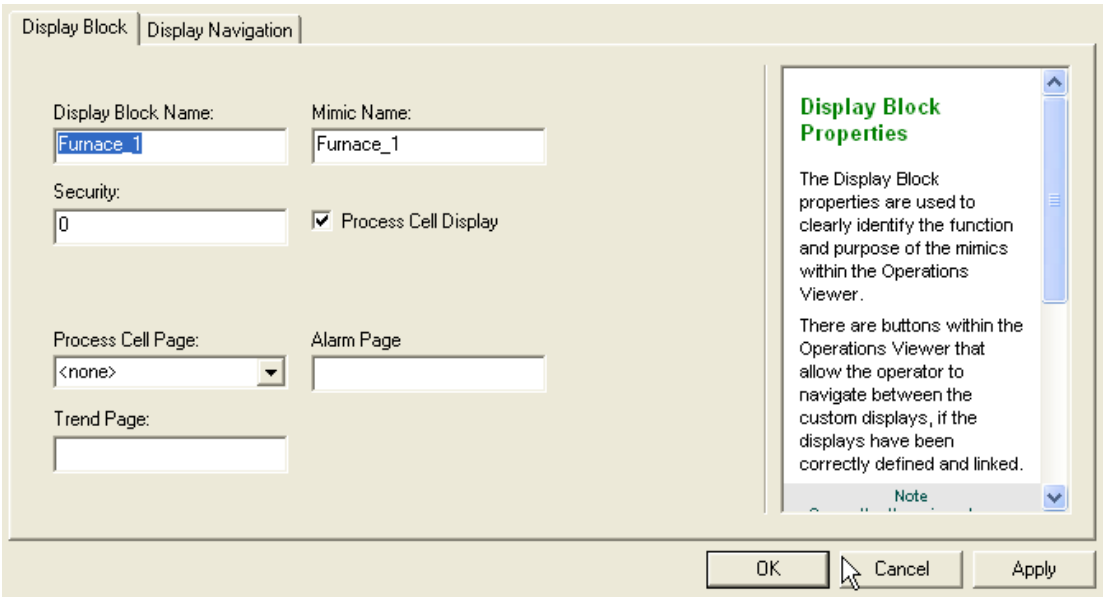
1. 'Finish' does not automatically launch the Build process.

2. Always Build from the Project folder down to the I/O Instrument Folder, or use the Full Project Build in Project Organiser (Project > Full Project Build). Refer to the Project Organiser Help File for full instructions.

22.2 CONFIGURING THE DISPLAY BLOCK

1. Edit Display Block properties.
2. Enter a Security Level value between 0 and 9999. This number is a restriction on access to the Mimic specified in the Mimic Name field. Only a Display Access Level (in Security Manager (SecMan)) equal or greater than that specified can open the Mimic.

   Note: Refer to the Security Manager Help File for full instructions about the Security field.



3. Edit Other Display Properties.

   From the drop-down menu, select the Process Cell page to be associated with this Display Block. The drop-down menu is a list of all Display Blocks indicated as a Process Cell Display by the Process Cell Display check box.

   If applicable, select the Alarm page to be associated with this Display Block from the drop-down menu. This menu contains a list of all Alarm Groups created in the Alarm Groups Editor.

   If applicable, select the Trend page to be associated with this Display Block, from the drop-down menu.

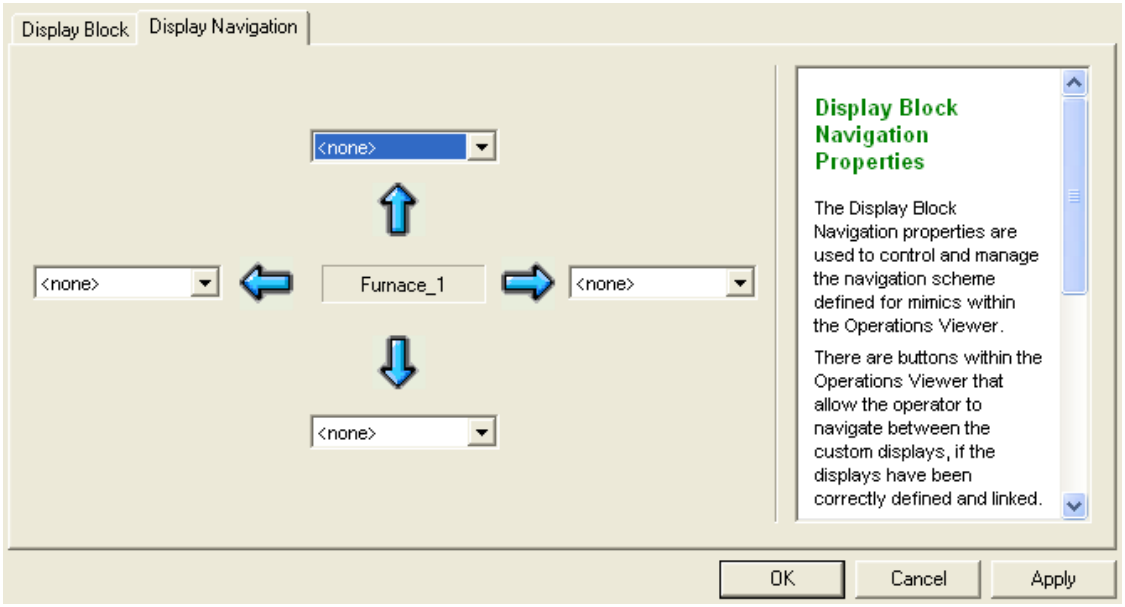
   If applicable, check the Process Cell check box to indicate the current Display Block is a Process Cell Display.

22.3 CONFIGURING THE DISPLAY NAVIGATION

1. Edit Display Navigation properties.

   From each of the drop-down menus, select the Display Block associated with the Mimic which is to be displayed when operating the Up, Down, Previous and Next display navigation buttons.

Note
For full instructions refer to information shown alongside each dialog.



Note: It is recommended that the Up Arrow block be set to 'Overview', to ensure a consistent link returning to the Overview Display block.

23 CONFIGURING SECURITY

Security configuration is carried out using Security Manager software (SecManDb.ujx). This is a very powerful tool as it controls system wide security features for all InTouch Nodes, Visual Supervisor Instruments and LINData by means of a master Security database. The Security database can be deployed manually or automatically and is used to restrict user actions, ensuring the system cannot be edited without Authorisation and/or Confirmation.

A security system is configured by allowing specific User Groups to access certain Security item actions.

The Security Manager (SecManDb.ujx) is launched via the Tools command in Project Organiser.

Note: Refer to the Security Manager Help File for full instructions.

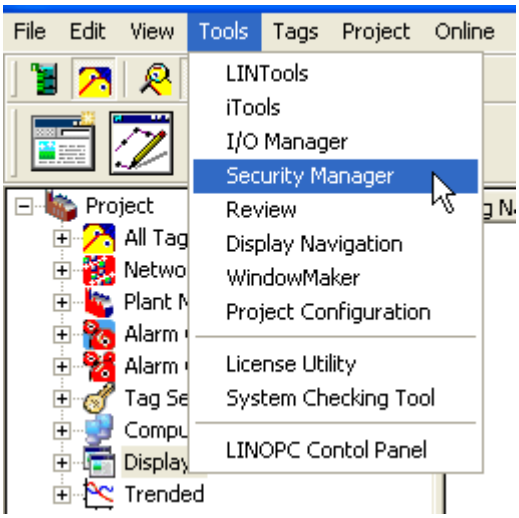
Caution

The Security Database must be deployed before any configured security parameters can operate. If this is not done, the user may be denied access to (be locked out of) an Instrument, possibly preventing vital maintenance from taking place. To avoid this 'lock out' problem, always deploy the Security Database to the relevant Security Items.

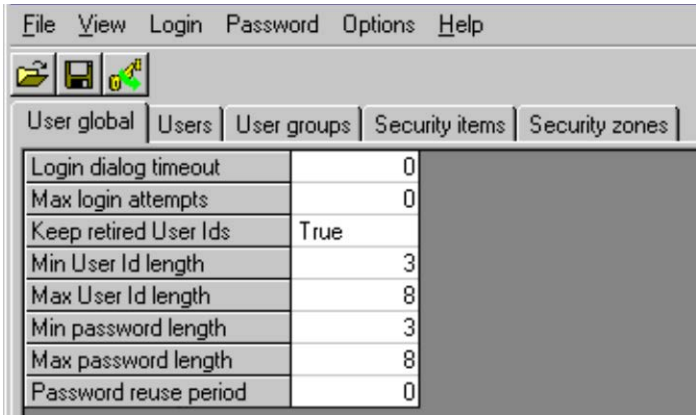
DEPLOYING THE SECURITY DATABASE

1. Assuming that Project Organiser has remained open, select the Displays folder.

2. Launch the **Security Manager** by pressing the  button, in the Application toolbar.



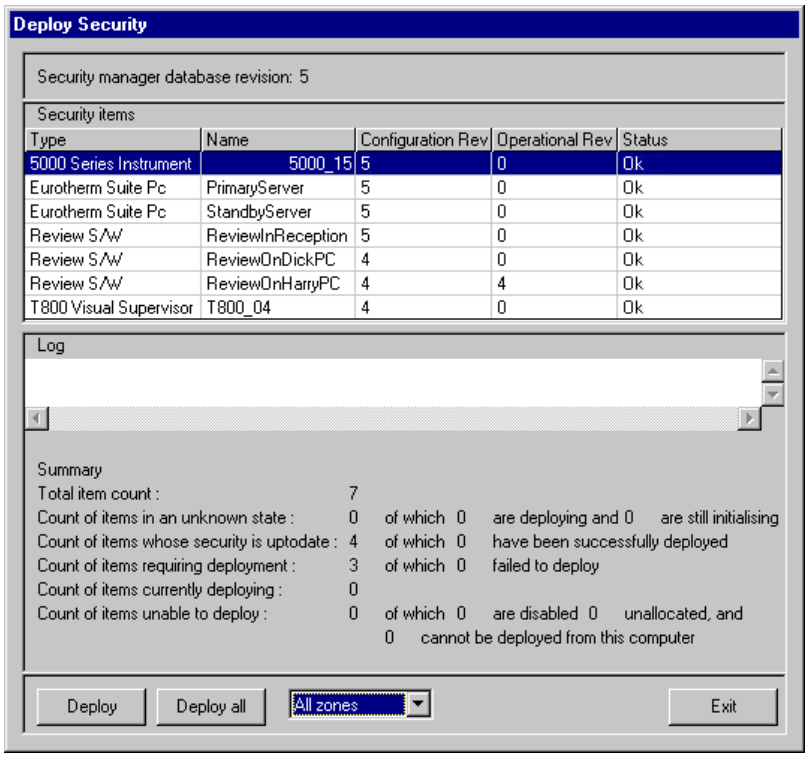
3. After entering the required Administrator User name, Password and, if appropriate, selecting the required level of regulation the Security Manager parameters are displayed.



4. Deploy the Security Database (File > Deploy Security)

Note: Both Project Database and Security Database can be deployed using the Deploy button,  , in the Application toolbar. A red Deploy button indicates databases must be deployed for the changes to take effect, a green button indicates that any changes that exist in the databases will not affect the Project. Refer to the Project Organiser Help File for full instructions.

This displays the Deploy Security dialogue



Deploy. Replicates the master Security Database to an individual Security Item destination or group of Security Items.

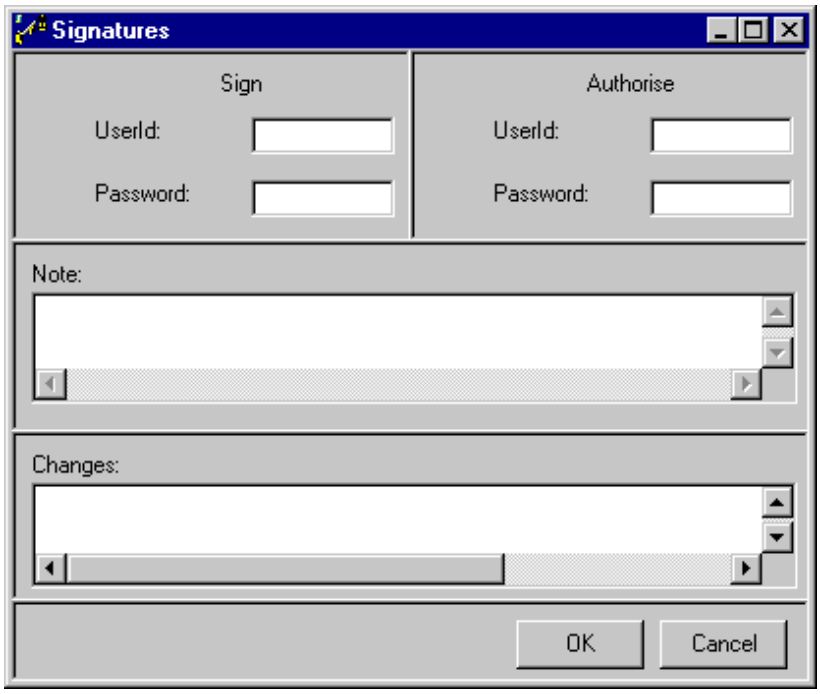
Deploy All/Zone. Replicates the master Security Database after selecting the destination Security Item from the Security Item list or after selecting the destination Security Items in the Zones drop down. Deploy to ALL Security items (button reads Deploy All) or the Security Items in the zone selected from drop down (button reads Deploy Zone).

Zones drop down. Select the Security Zone containing the Security Items that must be deployed to before pressing the Deploy or Deploy All/Zone buttons.

Exit. Press to return to the Deploy Security Window.

5 Enter any applicable information required by the Save dialog window that appears and Press 'OK' to confirm the destination of the deployed Security Database.

Note: A 'Note' field allows information to be added and the 'Sign' field allows for the input of 'Electronic Signatures'.



6. After confirming the destination to the selected Security Items, the Deploy Security dialog window reappears. It now shows the attempted reconciliations and downloads to the selected items in the 'Log' field of the window.
7. Press EXIT on the Deploy Security dialogue to return to the Security Manager Window.
8. Press EXIT on the Security Manager Window to return to the Project Organiser.

24 CONFIGURE ALARM HISTORY

Alarm History is configured using the Alarm Logger Configuration (AlarmLogCfg.exe). This tool controls the detection and display of alarms. It allows the logging parameters to be configured, including the Priority Range, Timing Parameters and Logging Intervals.

The Alarm Logger Configuration (AlarmLogCfg.exe) is located along with the other AlarmSuite Tools in the Program Files folder.

EurothermSuite 1.x/2.x (InTouch 7.0/7.11)

<Drive>\Program Files\FactorySuite\InTouch\AlarmLogCfg.exe

EurothermSuite 3.x and later (InTouch 8 and InTouch 9)

<Drive>\Program Files\Wonderware\InTouch\AlarmLogCfg.exe

CONFIGURE ALARM HISTORY

Open the Alarm Logger Configuration.

EurothermSuite 1.x/2.x (InTouch 7/7.11)

Start > Program > Wonderware FactorySuite > AlarmSuite > Alarm Logger Configuration

EurothermSuite 3.x and later (InTouch 8 and InTouch 9)

Start > Program > Wonderware > AlarmSuite > Alarm Logger Configuration

Configure the Filter, Logging, Advanced and dbase tabs appropriately.

> Note: Refer to the Install and Configure the Alarm History section in the EurothermSuite Installation and Setup Guide (HA028188) for full instructions.

25 CONFIGURE AlarmSuite

The AlarmSuite application provides you with a set of components that extend and integrate Wonderware FactorySuite through enhanced functionality for the collecting, managing, and the visualising of process alarms and events into an SQL database. It also provides a knowledge database that can be used to analyse process and machine performance.

> Note: Alarms and events can be visualised and analysed using the set of ActiveX visual components supplied with AlarmSuite. These components also allow you to cross-correlate process events with historical process data, SPC data, and tracking data.

In addition to process-related alarms, AlarmSuite can maintain a comprehensive log of operator actions, including logon/logoff events and setpoint changes. Custom reports and displays are easily developed using AlarmSuite and FactorySuite tools.

> Notes:
>
> 1. InTouch alarms can be automatically stored in Wonderware IndustrialSQL Server (Version 7.1 or later) or Microsoft SQL Server (Version 7.0 or later) using the Wonderware AlarmLogger component.
>
> 2. Before using this application ensure that the AlarmSuite Purge and Restore Utilities have been added to the Windows Start menu.

TO CREATE A SHORTCUT IN THE START MENU

1. Open an Explorer window.
2. Open the AlarmSuite Application folder (Start >... > AlarmSuite)
3. Create a New Shortcut by starting the Windows Create Shortcut wizard (File > New > Shortcut)
4. Use the Browse button or enter the full path name to locate the AlarmSuite Purge Utility (generally to be found in the Program Files folder).
5. Select ‘OK’ to accept the AlarmSuite Purge Utility. Completion is confirmed by pressing the ‘Finish’ button.
6. Repeat these instructions for the AlarmSuite Restore Utility.

25.1 AlarmSuite PRINT

This provides continuous alarm printing from a database, which means that alarms are printed as they are logged. Multiple AlarmSuite Print Utilities can be operating at the same time to print (identical or different) alarms to multiple printers.

> Note: The AlarmSuite Purge and Restore Utilities control and manage the Alarm History database; they do not affect the AlarmSuite Print Utility.

The AlarmSuite Print Utility (AlarmSuitePrint.exe) is located along with the other AlarmSuite Tools in the Program Files folder.

For EurothermSuite 1.x/2.x (InTouch 7/7.11) the file is found at:

<Drive>\Program Files\FactorySuite\InTouch\AlarmSuitePrint.exe

For EurothermSuite 3.x and later (InTouch 8 and InTouch 9) the file is to be found at:

<Drive>\Program Files\ Wonderware\InTouch\AlarmSuitePrint.exe

TO CONFIGURE ALARMSUITE PRINT

1. Open AlarmSuite Print, then follow the instructions in the AlarmSuite Print Help file.

For EurothermSuite 1.x/2.x (InTouch 7/7.11), AlarmSuite Print is to be found at:

Start > Program > Wonderware FactorySuite > AlarmSuite > AlarmSuite Print

For EurothermSuite 3.x and later (InTouch 8 and InTouch 9) it is found at:

Start > Program > Wonderware > AlarmSuite > AlarmSuite Print

25.2 AlarmSuite PURGE

This allows the manual or automatic) to purging and/or archiving of alarms and events that have been collected by the Alarm History database.

> Note: The AlarmSuite Purge and Restore Utilities control and manage the Alarm History database; they do not affect the AlarmSuite Print Utility.

The AlarmSuite Purge Utility (AlarmSuitePurge.exe) is located along with the other AlarmSuite Tools in the Program Files folder.

For EurothermSuite 1.x/2.x (InTouch 7/7.11) the file is found at:

<Drive>\Program Files\FactorySuite\InTouch\AlarmSuitePurge.exe

For EurothermSuite Server 3.x and later (InTouch 8 and InTouch 9) the file is to be found at:

<Drive>\Program Files\ Wonderware\InTouch\AlarmSuitePurge.exe

TO CONFIGURE ALARMSUITE PURGE

1. Open AlarmSuite Purge, then follow the instructions in the AlarmSuite Purge Help file.

For EurothermSuite 1.x/2.x (InTouch 7/7.11), AlarmSuite Purge is to be found at:

Start > Program > Wonderware FactorySuite > AlarmSuite > AlarmSuite Purge

For EurothermSuite 3.x and later (InTouch 8 and InTouch 9) it is found at:

Start > Program > Wonderware > AlarmSuite > AlarmSuite Purge

25.3 AlarmSuite RESTORE

This allows the user to take data that has been archived using the AlarmSuite Purge Utility and restore it to a specified target database to permit reporting and analysis. Any previously archived alarms/events do not have to be restored to the same database from which they were archived. In many cases, it may be more desirable to create an “offline” database to be used for restoring archived data.

> Note: The AlarmSuite Purge and Restore Utilities control and manage the Alarm History database; they do not affect the AlarmSuite Print Utility.

The AlarmSuite Restore Utility (AlarmSuiteRestore.exe) is located along with the other AlarmSuite Tools in the Program Files folder.

For EurothermSuite 1.x/2.x (InTouch 7/7.11) the file is found at:

<Drive>\Program Files\FactorySuite\InTouch\AlarmSuiteRestore.exe

For EurothermSuite 3.x and later (InTouch 8 and InTouch 9) the file is to be found at:

<Drive>\Program Files\ Wonderware\InTouch\AlarmSuiteRestore.exe

TO CONFIGURE ALARMSUITE PURGE

1. Open AlarmSuite Restore, then follow the instructions in the AlarmSuite Restore Help file.

For EurothermSuite 1.x/2.x (InTouch 7/7.11), AlarmSuite Restore is to be found at:

Start > Program > Wonderware FactorySuite > AlarmSuite > AlarmSuite Restore

For EurothermSuite 3.x and later (InTouch 8 and InTouch 9) it is found at:

Start > Program > Wonderware > AlarmSuite > AlarmSuite Restore

26 DEPLOYING THE PROJECT (DATABASE)

The Project Database and Security Database are deployed to allow client computers to run the InTouch Application from the Development Server (DS).

Notes:

1. Systems configured with more than 10 Windows NT workstations (including any office computers (or similar)) are supported only by the Windows Server Operating System.
2. To ensure successful deployment of one or both of the databases and operation of the InTouch Application on client computers, the following must be observed.

a. Each computer must have an active, fully functional, EtherNet connection. Windows sharing will not be active if the network is disconnected.

b. Each computer must have a 'Shared' network path to the Project folder that will contain a replica Project database.

c. There must be an identical Administrator login for all computers in the plant/system.

27 OPERATIONS SERVER/VIEWER

The Operations Server/Viewer allows the User to view various parts of the system from a single location. Project Organiser provides a central environment to launch a single instance of the Operations Server/Viewer, by allowing the startup of all the relevant applications used by the Operations Viewer.

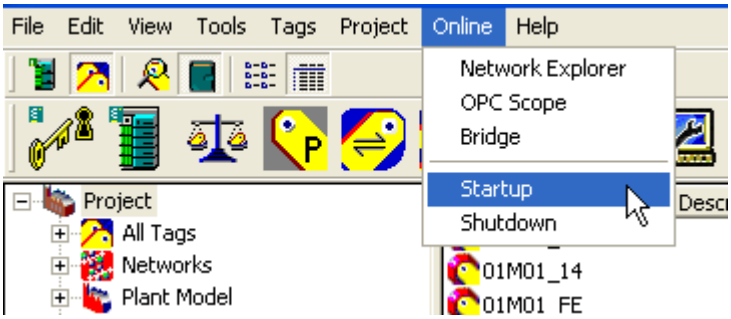
Note: For full instructions refer to the appropriate InTouch Help File located at the default InTouch installation path Start > Programs > ... > Books

27.1 STARTUP OPERATIONS SERVER/VIEWER

This starts all the appropriate server applications (InTouch WindowViewer, LINData, Historical Data Manager, File Reconcile Utility, WonderWare Logger, and Alarm Provider) required to operate with the Operations Server / Viewer. In a Distributed system, Operations Server/Viewer will copy the InTouch Application from the configuration station to the local Network Application Development (NAD) folder.

OPERATIONS SERVER/VIEWER STARTUP

1. Assuming that Project Organiser has remained open, select the Project folder.
2. Launch the Operations Server/Viewer, including all server applications, e.g. WindowViewer, LINData, Alarm Provider, AlarmLogger, Historical Data Manager, by pressing the Startup button,  , in the Application toolbar.



27.2 SHUTDOWN OPERATIONS SERVER/VIEWER

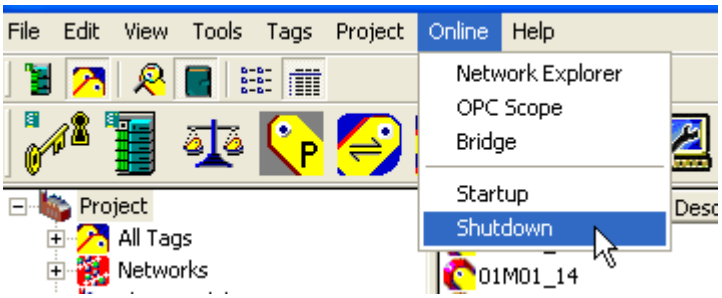
This shuts down all runtime software components (such as InTouch WindowViewer, LINData, Historical Data Manager, File Reconcile Utility, WonderWare Logger and Alarm Provider) currently operating with the Operations Server/Viewer.

27.2.1 Operations Server/Viewer Shutdown

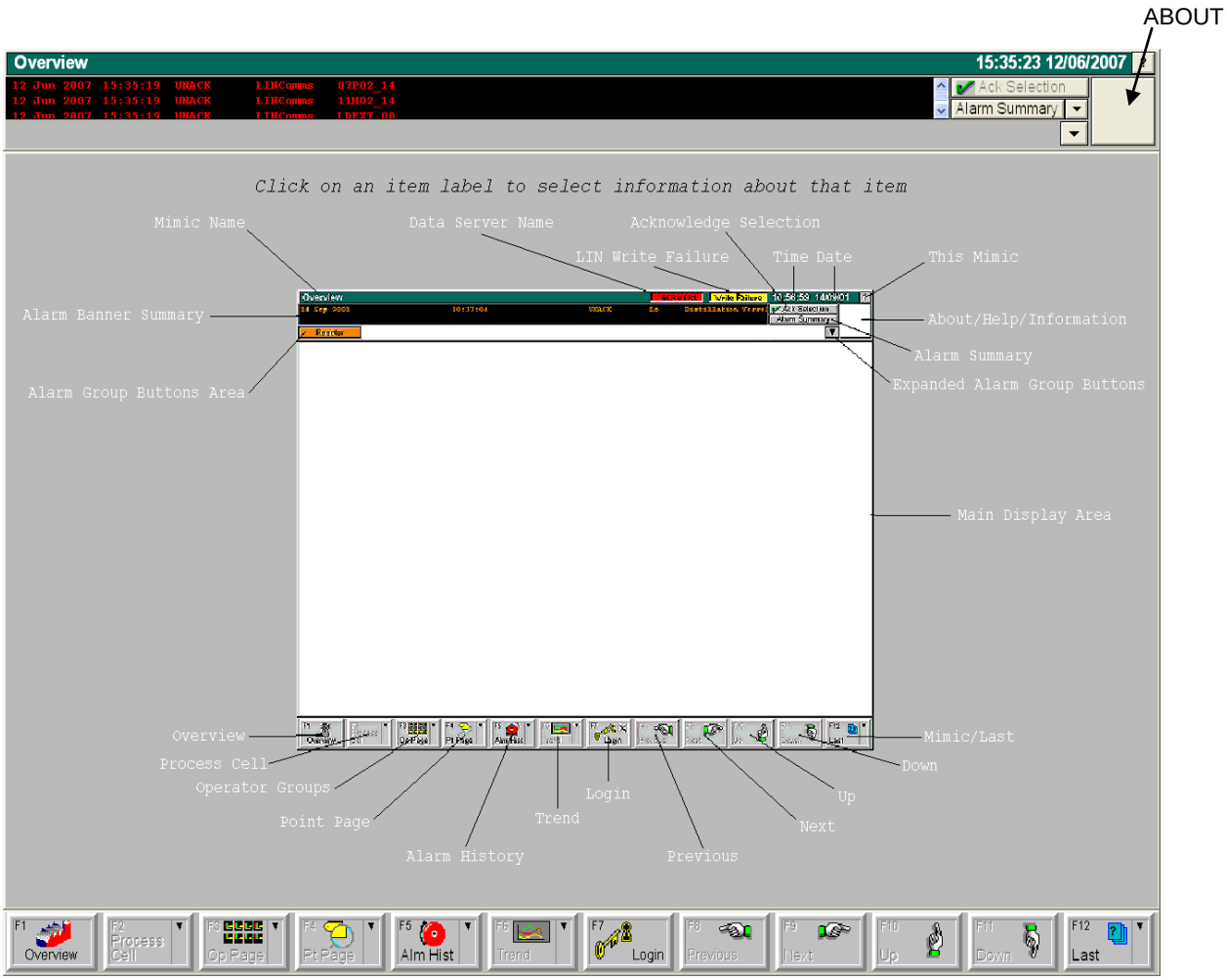
1. Assuming that Project Organiser has remained open, use the <Alt+Tab> key to select the Project Organiser.

2. Terminate the Operations Server/Viewer by pressing the Shutdown icon,  , in the Application toolbar.

   This shuts down all runtime software components.



Note: If Project Organiser has been closed, Operations Server/Viewer can be Shutdown using About > Shutdown View. (This shuts down only the Operations Server/Viewer.)



27.3 CUSTOMISING AN OPERATIONS SERVER/VIEWER

Each Operations Server/Viewer, using all the appropriate server applications (InTouch WindowViewer, LINData, Historical Data Manager, File Reconcile Utility, WonderWare Logger, and Alarm Provider) can be customised by editing the Shell Application features.

> Note: For full instructions refer to the Operations Viewer, Shell Application Internals Manual, Part no. HA028882.

27.4 OPERATIONS SERVER AS A SERVICE

The Operations Server is the software necessary to 'serve' data to run-time applications in the system. This includes operations such as communicating with the instrument network, receiving and logging data, and so on.

A configuration utility allows the user to select 'High Availability' (recommended) or 'Standard' as the run mode for the software. If this selection is changed, the change does not come into effect until the Operations Server is restarted. If the Server is already running in 'High Availability' mode, the server must be stopped before any attempt is made to change to 'Standard' mode.

27.4.1 Standard mode

In 'Standard' mode (the default mode) the Operations Server behaves interactively, presenting the user with a series of windows containing buttons, tick boxes, text fields and so on, acting as an interface between the user and the software. The Operations Server must be started manually in 'Standard' mode, and it stops running when the user logs off.

27.4.2 High Availability mode

When running 'High Availability' mode, the various software processes (LINOPC, LINData, Alarm provider etc.) that provide data logging and handling run as a service that is configured to start automatically, as a part of the operating system boot procedure, when the PC is powered up. The Server runs, communicating with the instrument network, receiving and logging data etc, for as long as the PC is powered, whether the user is logged in or not. The Server runs in background, and has no user interface.

To ensure high availability, the system continuously monitors the health of the Operations Server and restarts it as quickly as possible after any problem has been detected.

> Note: It is recommended that the Operations Server is run in 'High availability' mode.

27.4.3 Configuration

The Configuration utility can be started in two ways, via the 'System Checking' tool, or via the Start menu.

SYSTEM CHECKING TOOL

The System checking tool is normally used when setting up the system for the first time. A 'Wizard' in the check tool reports the current running mode, and provides a button which, when clicked on, launches the configuration utility.

START MENU

The configuration utility can also be started from the 'High Availability Config' item in the Program Files / Eurotherm / Utilities menu.

Figure 26.4.3 shows the Server mode selection window, with High availability mode selected. This selection automatically enables the Password field.

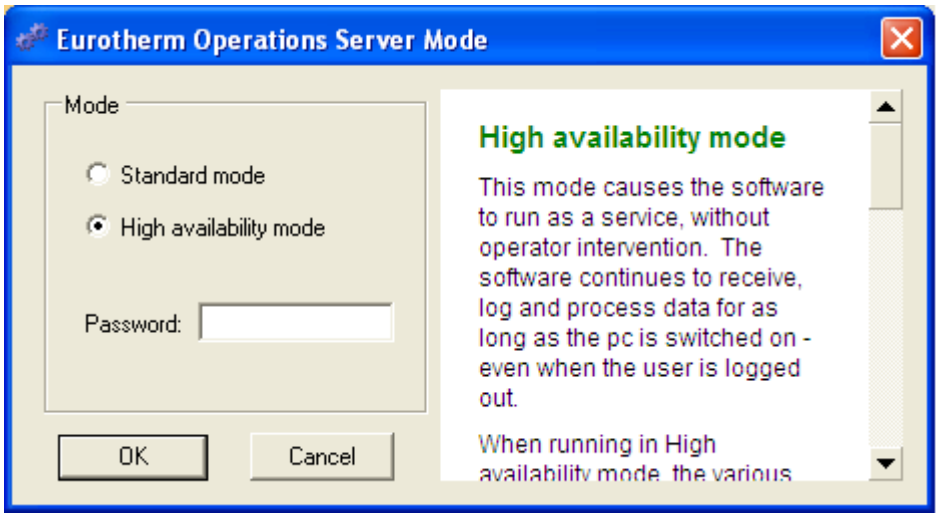


Figure 27.4.3 Server mode window

PASSWORD

In 'High availability' mode, a Password is required for the EPASYSTEM account that is automatically configured when the system is set up using the System Checking tool. The password allows the Operations Server actions (e.g. writing/reading files to/from the registry) to be validated against a specific user account whilst the user is logged out. The (case sensitive) default password is: EPABN148NN, but this may have been edited during 'Create Users & Groups' (if for example this default is insufficiently complex for the administering security system), in which case, if the user does not know the new password, assistance must be sought from the system administrator.

Once the password has been entered and the 'Ok' button clicked, the password is validated. If the entered password is incorrect, a message appears asking the user to enter the correct password. If the entered password is correct, the configuration utility exits, and the next time the pc is restarted, the Operations Server starts up in High availability mode.

27.4.4 Advanced users

Caution

It is recommended that the file described below be edited only by users who are confident in what they are doing. Incorrect editing can lead to loss of data, loss of communications or other undesirable system behaviour.

When Operations Server is started, several different software processes are launched. These provide communications with the LIN network, data and alarm logging and visualisation. It is possible to define which processes are started by editing a file called fsdeply.cfg. This file can be found in Program Files / Eurotherm / ESManager.

An example of a typical entry is as follows:

[START,SERVER,INTOUCH]

!START,C:\Program Files\Wonderware\InTouch\AlarmSuitePurge.exe

START,LINData.exe

DELAY,10000

!MINIMISE,AlarmSuite Purge Utility

START,CanaryLabsLogger

START,HistData.exe

START,AlarmLogger

DELAY,2000

START,View

START,FileRec.exe

DELAY,2000

MINIMISE,Historical Data Manager,HistMgr

MINIMISE,LINData,LINData

MINIMISE,Eurotherm File Reconcile Utility

START,AlrmProv.exe

It is possible, by editing this file, to add (remove) processes that the user may (not) wish to run, for example a third party OPC client.

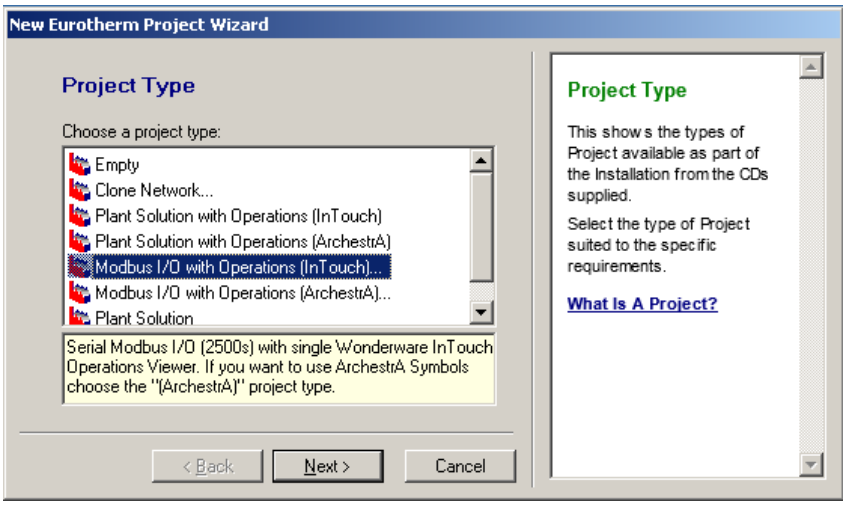
28 CREATE A MODBUS DATA PROVIDER

Note: In this example configuration the following equipment was used 2500 Ethernet configured via iTools for address 192.168.111.2 and Modbus address = 2 fitted with an AI2 module in slot 1.

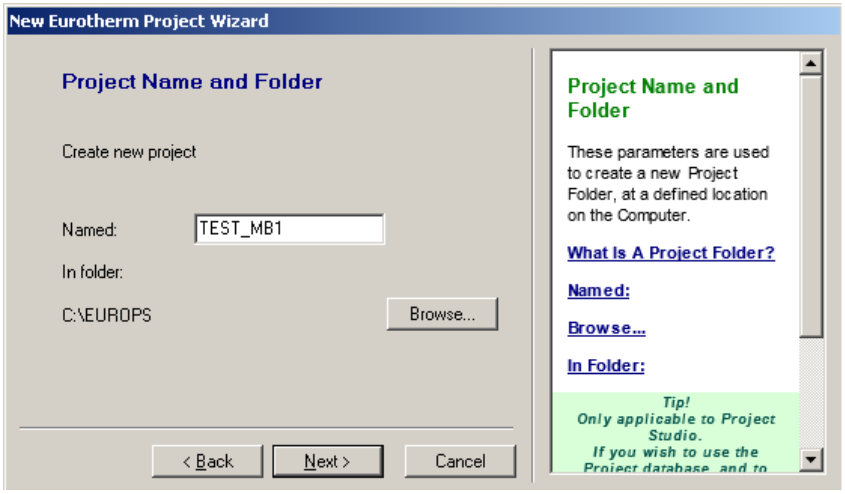
28.1 Create a new project

To create a Modbus Data Provider, the first step is to create a new project. Proceed as follows:

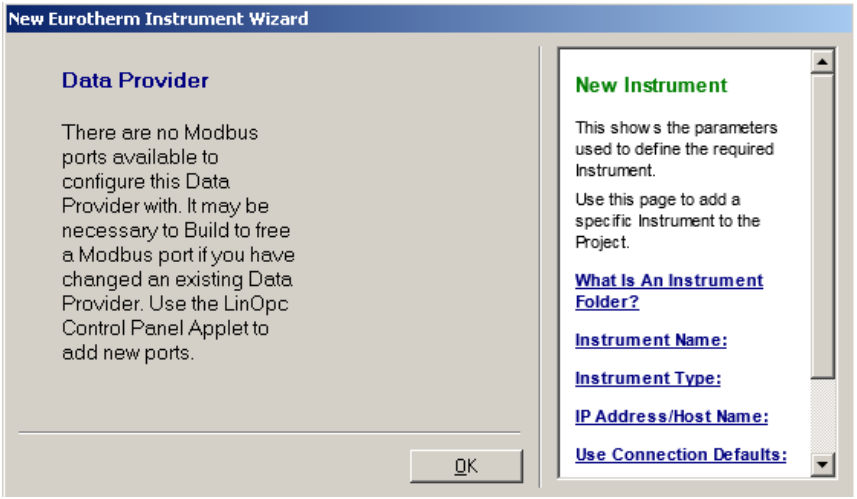
1. Start the Eurotherm Project Wizard to create a new project as described in Section 2.
2. Choose 'Modbus I/O with operations (InTouch)' option.



3. Click on the 'Next' button and enter the name of the project, for example 'TEST_MB1'.



4. Click on the 'Next' button.
5. If no Modbus ports have been created previously, the following dialog will be displayed.

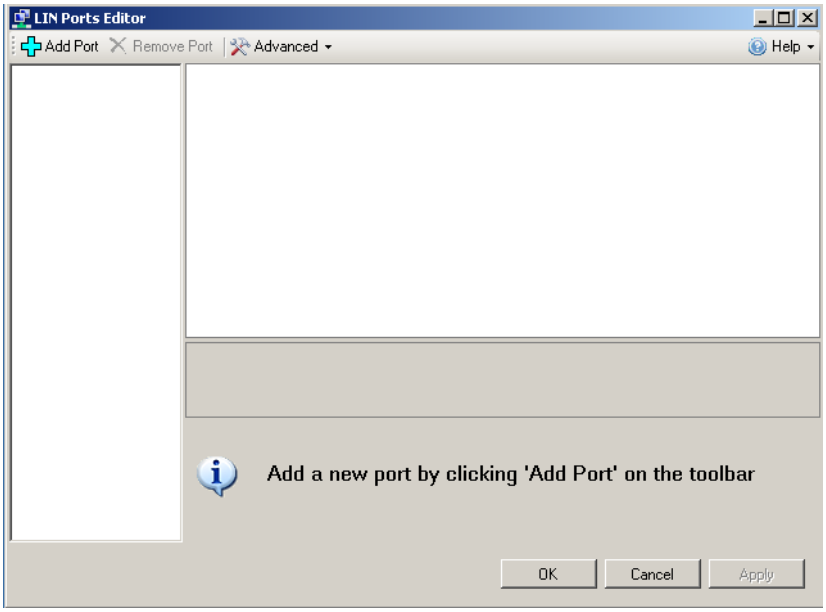


If a port is already available, the wizard will automatically select this port and prompt for confirmation.

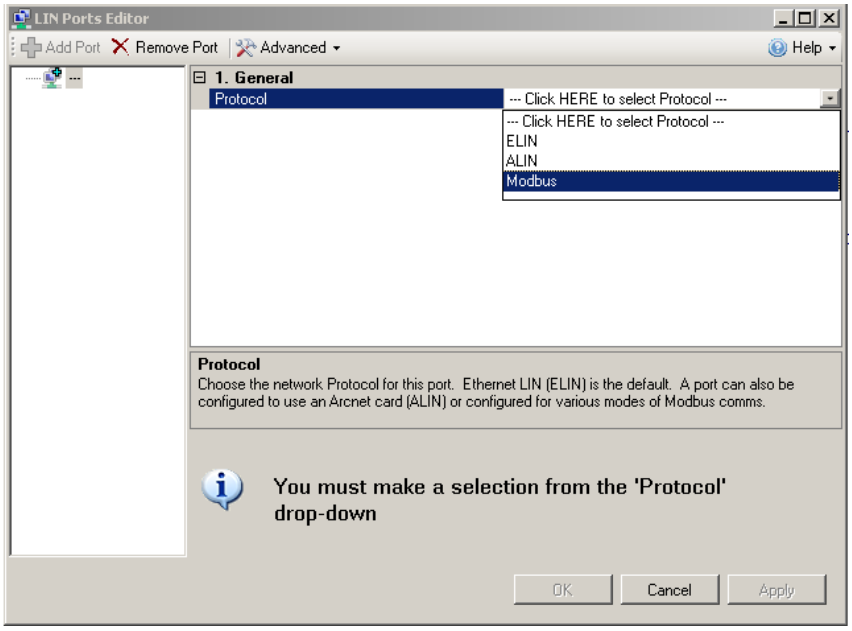
6. The project wizard will complete its task by performing a project build and running the Project Organiser.

28.2 Create a Modbus port via the LinOPC applet

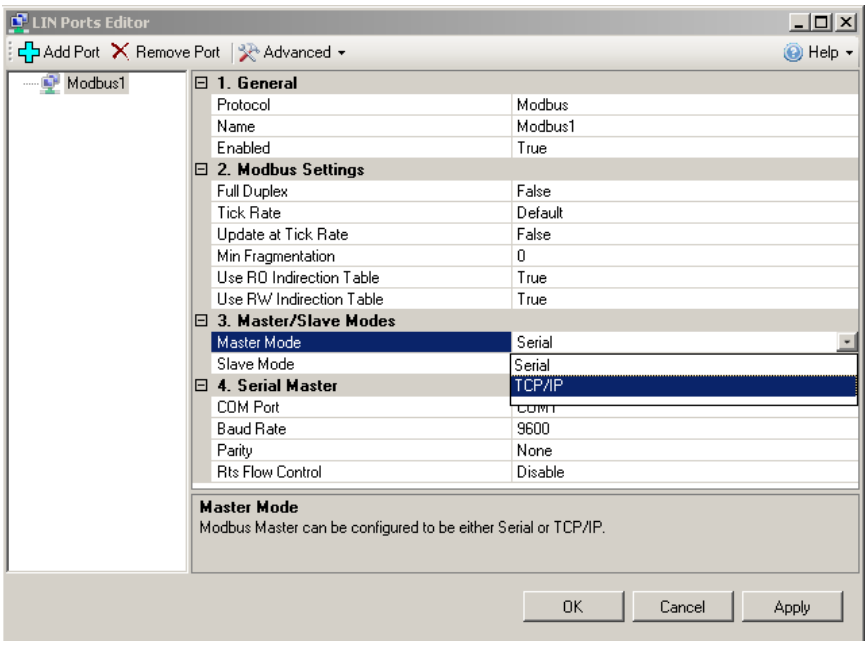
To use the LinOPC applet, proceed as follows:



1. On the LinOPC applet screen, press the Add Port button on the toolbar.



2. Use the drop-down menu to select Modbus.

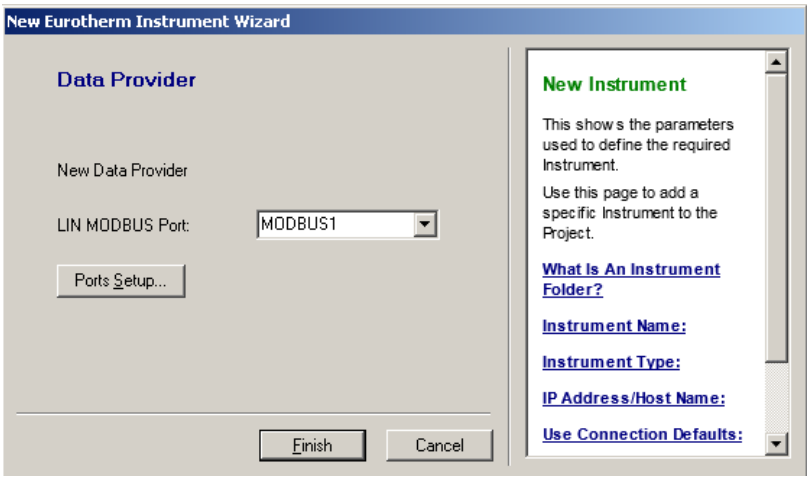


3. Locate the Master Mode and change its setting to TCP/IP and then press the OK button. The port is now ready for use.

28.3 Completing the Data Provider set-up

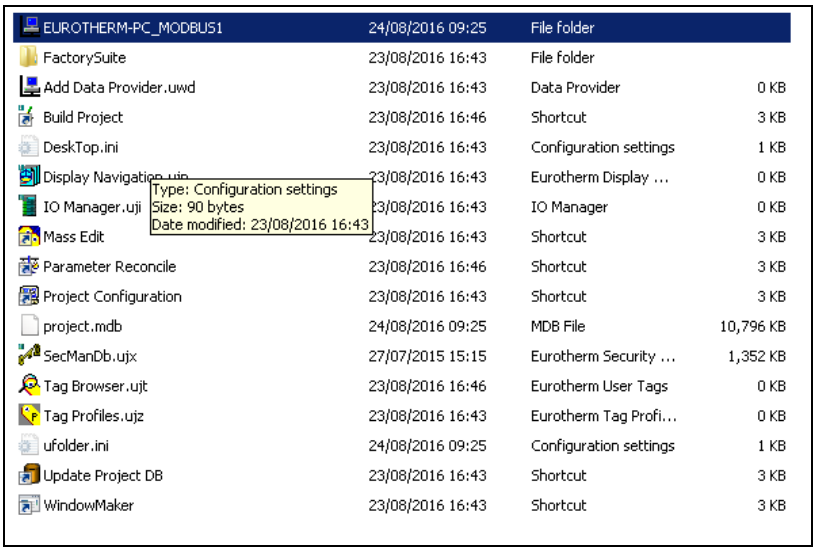
To finish the Data Provider set up, proceed as follows

1. Navigate to the project and locate the Add Dataprovider.uwd file.

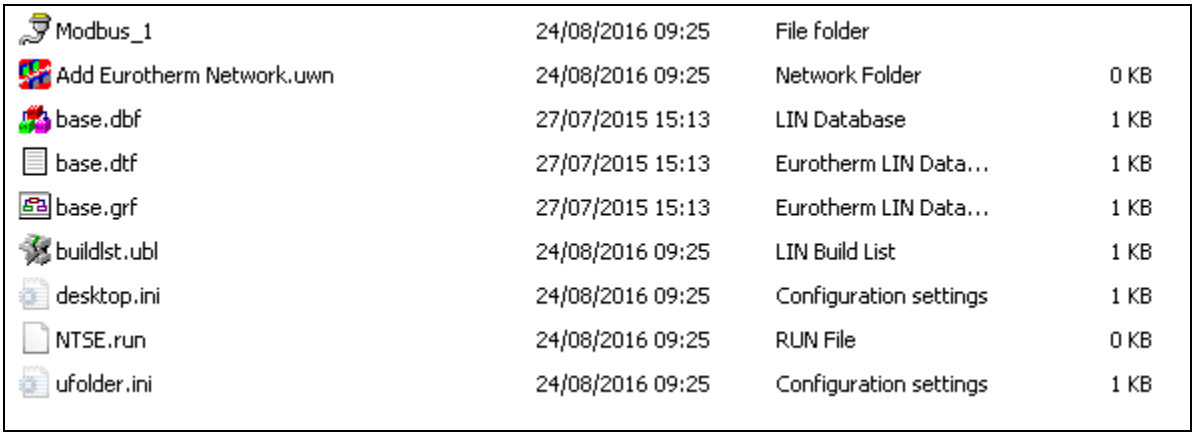


2. Press 'Finish' to complete the setup.
3. A folder will be created and named in the format:

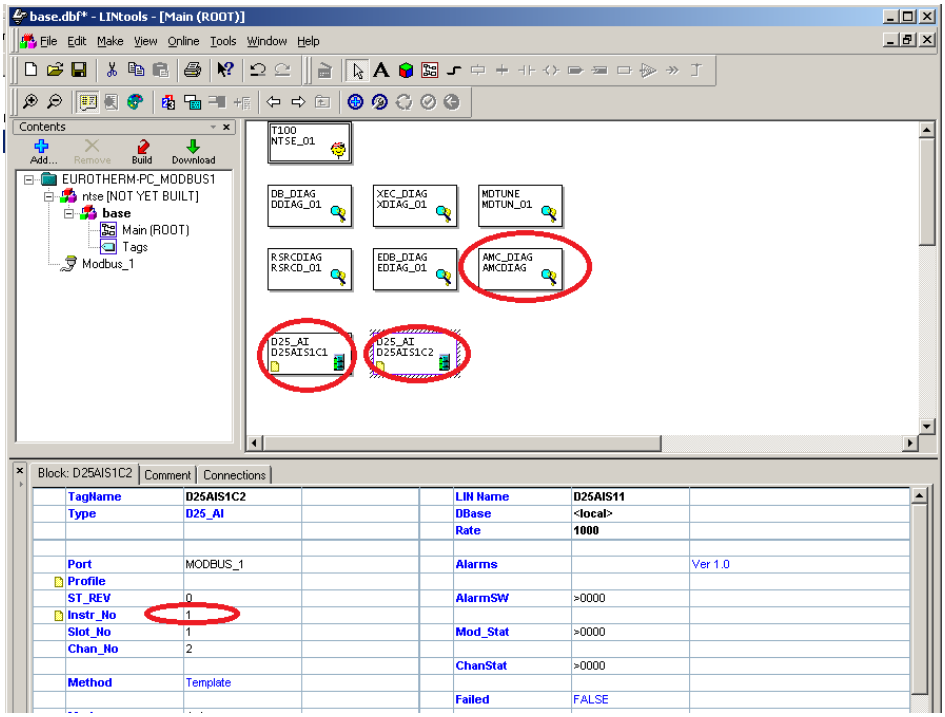
   <PC name>_<Port Name> e.g EUROTHER-PC_MODBUS1



4. The folder will contain an empty blended database ready for configuration.



5. Use LINtools to open the base.dbf file and add two D25_AI blocks Channel 1 and Channel 2 for diagnostics and add an AMC_DIAG block. Check that the slot and channel number match the instrument.
6. Enter the Instr_No field to the value 1.

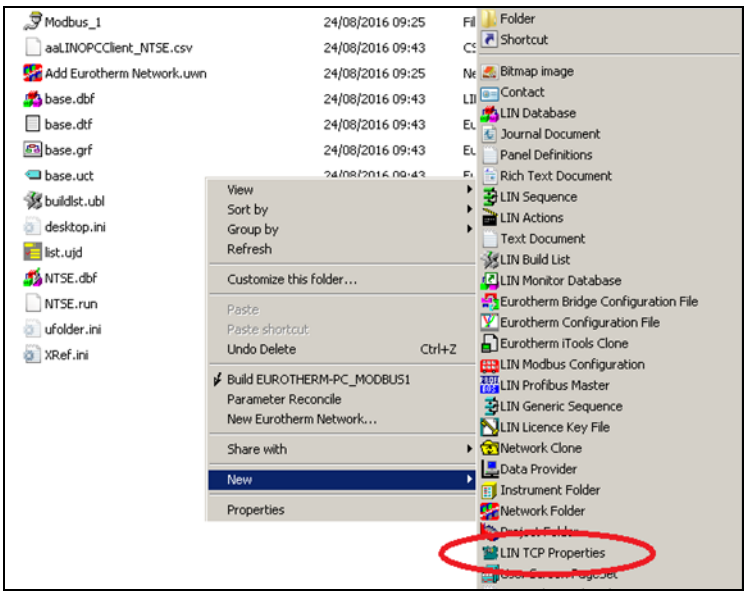


7. Save and build the database.

28.4 Map IP address

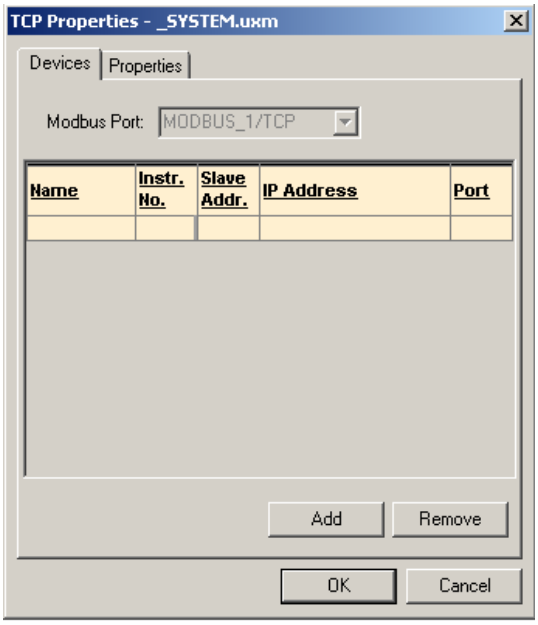
To communicate to the instrument we need to map the IP address to the instrument specified as Instr_No = 1.

1. Right-click in the folder, select New.
2. In the list of file options select LIN TCPproperties.

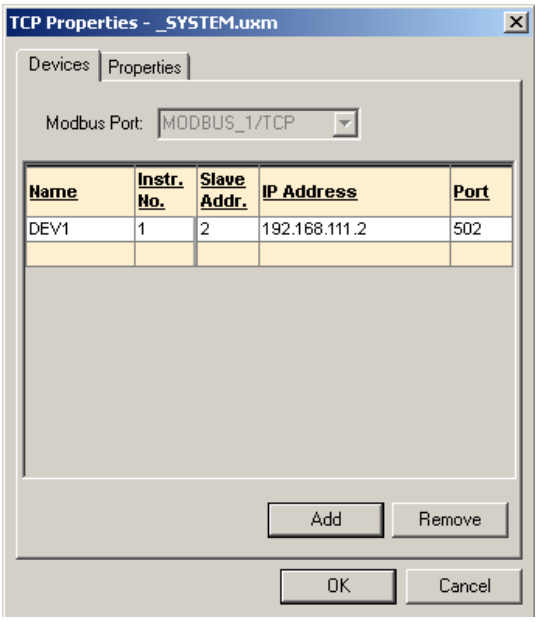


3. This will create a file called New LIN TCP properties.uxm.

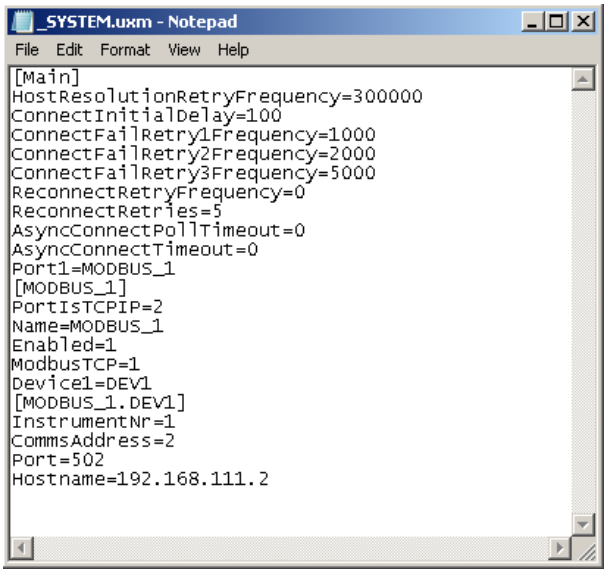
4. Rename this file _SYSTEM.UXM. If the Eurotherm software version < 4.5 rename the file NTSE.UXM.
5. Right-click the file and select open with MdbTools.



6. Right-click the file and select open with MdbTools.
7. Press the Add button to create a new entry and then modify the values as required.

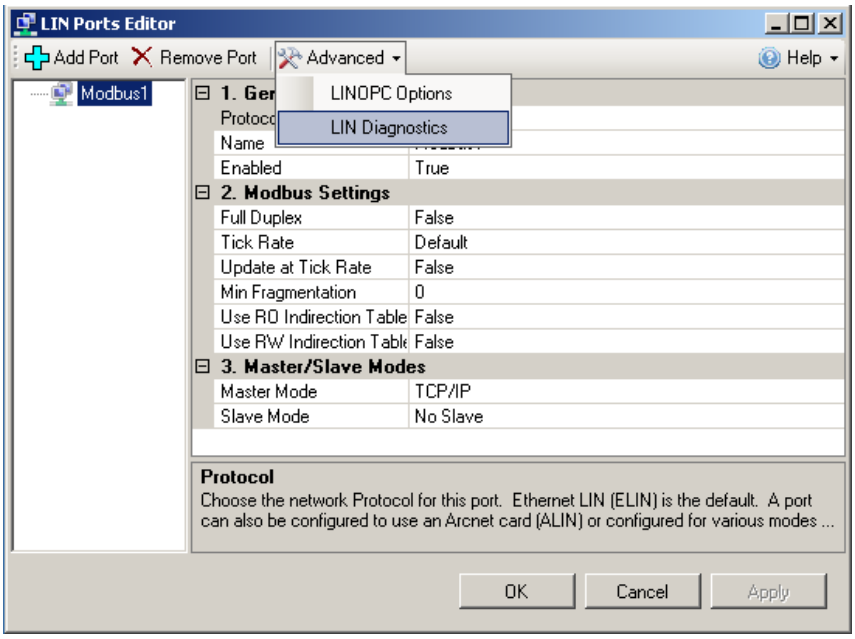


8. Then press 'OK'.
9. Check that the file contains some data by opening the file with Notepad. The file contents should look like this:

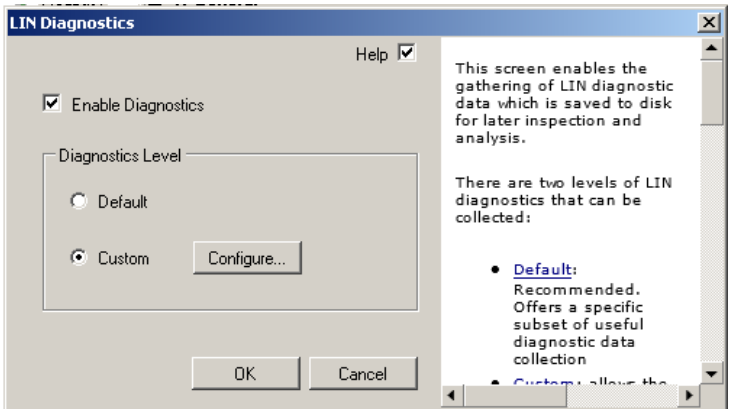


28.5 Testing the configuration

To test the configuration, use the diagnostic tools in the LinOPC applet to view the NTSE database.

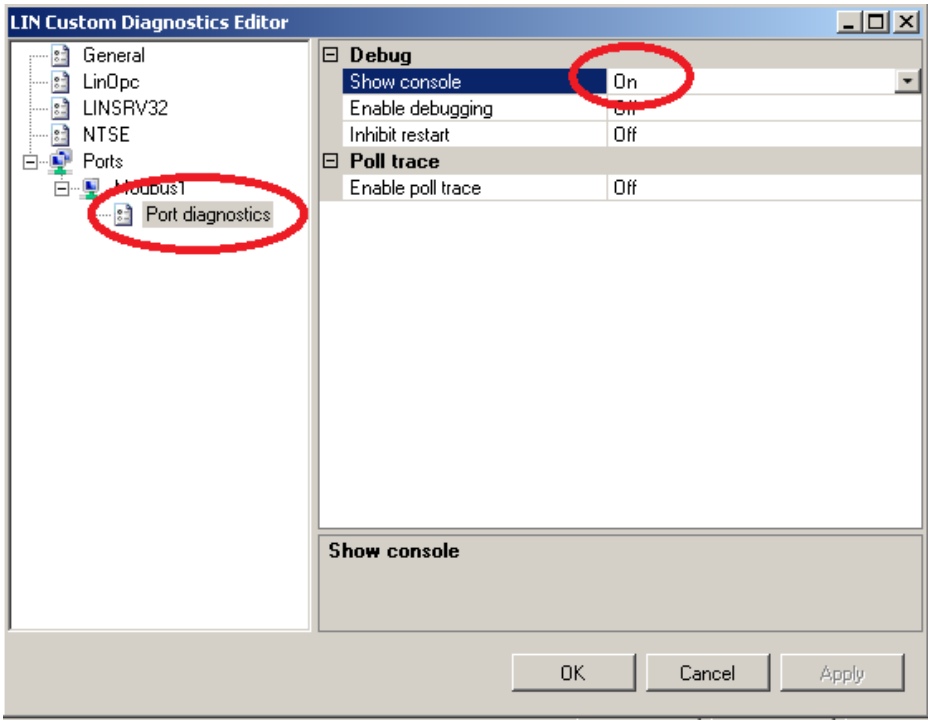


1. When prompted enable the diagnostics and select Custom.



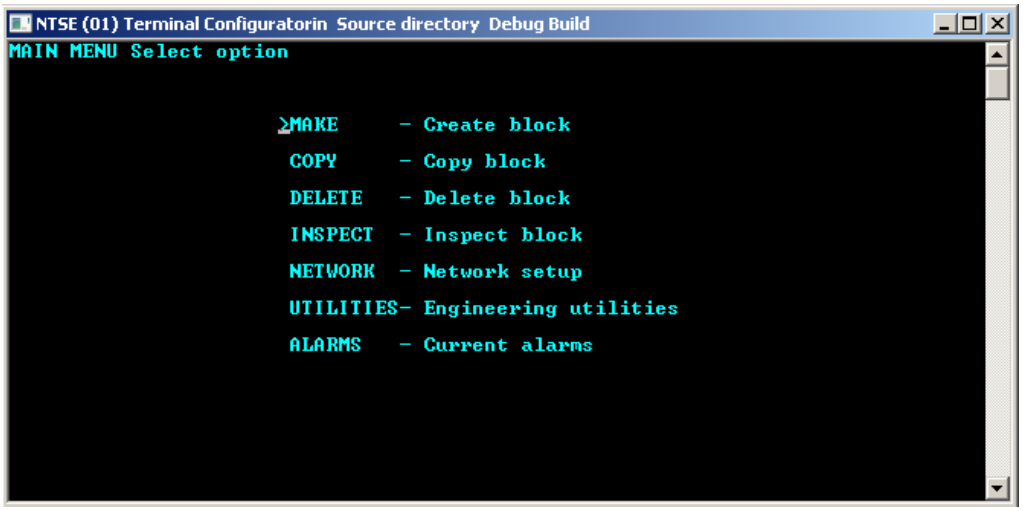
2. Press the Configure button.

3. Select the Port diagnostics below Modbus1 in the tree – check that the 'Show Console' option is set to 'On'.

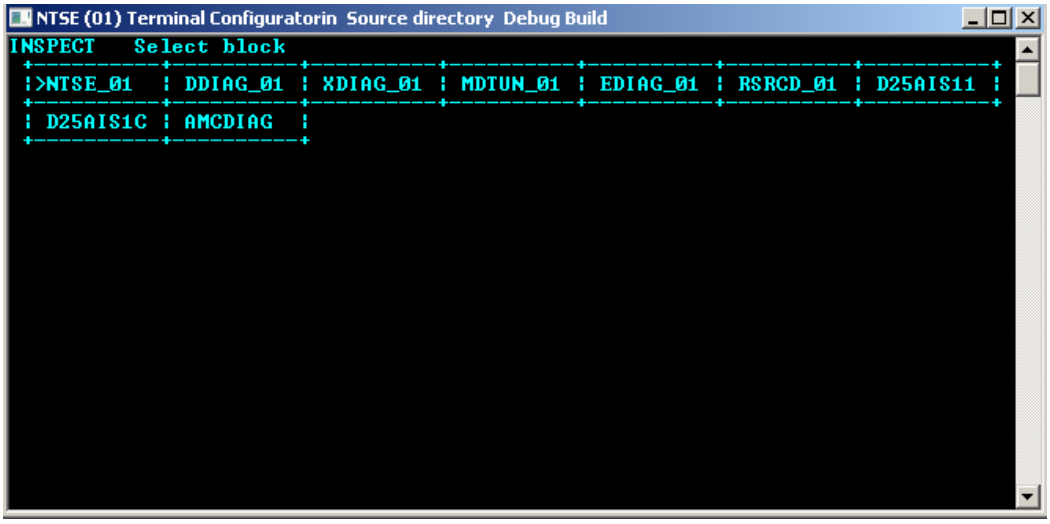


4. Press OK when done.

5. Run the database by starting the LinData process. With the diagnostic console enabled the following window will be displayed:

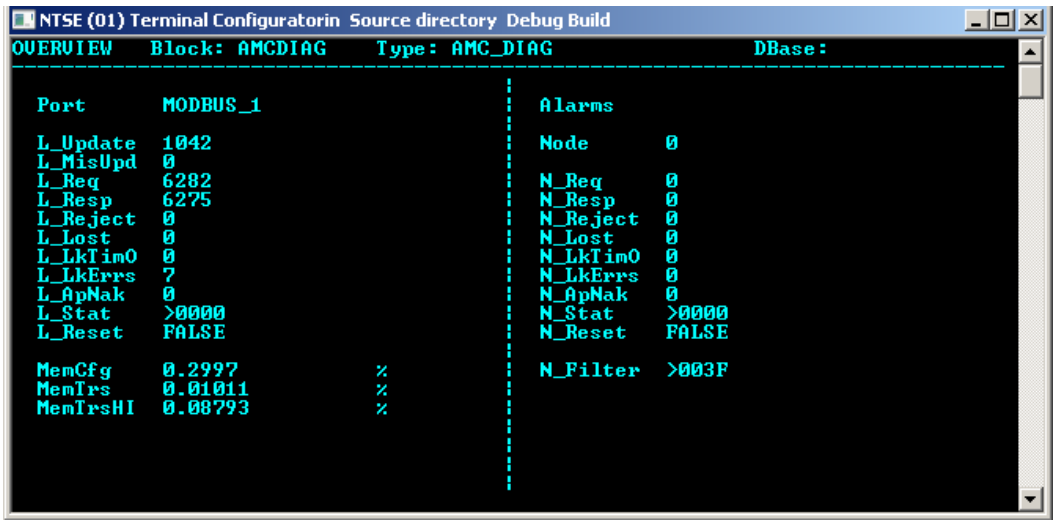


6. Cursor down to the INSPECT option, the console will display the blocks in the database.



7. Select the AMCDIAG block and press 'Enter' on the keyboard.
8. The console will display the block details if the block is communicating with the instrument.

Note: The fields L_Req and L_Resp should be approximately the same.
Field Items such as L_LkTim0, L_LkErrs should not be changing value.

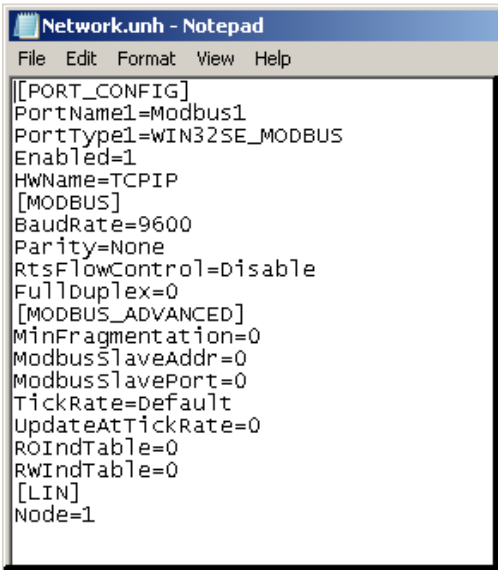


28.6 Workaround for PAC8 Installations

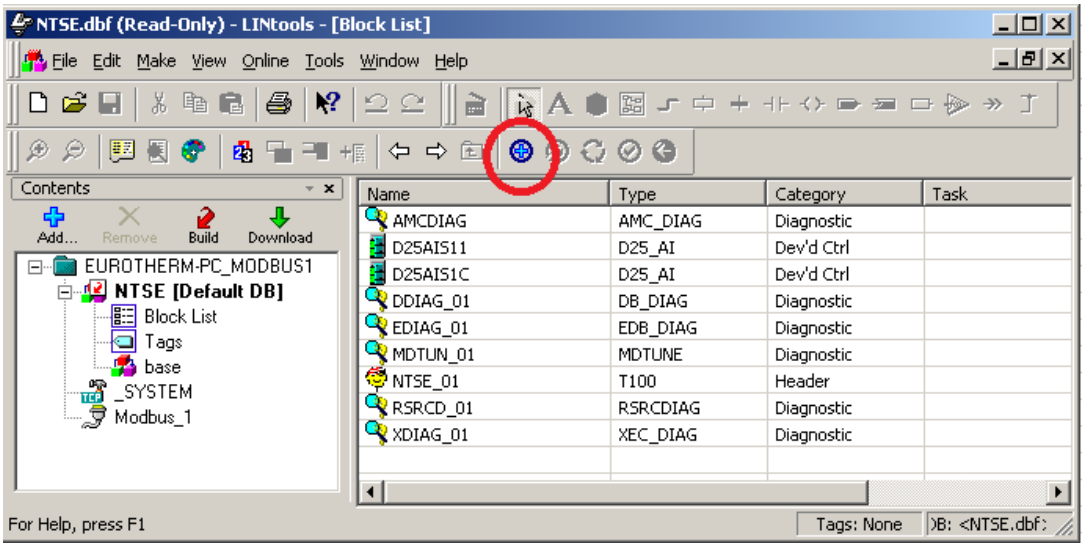
If PAC8 has been installed, the following workaround can be used to connect to the NSTE database via LINtools, previously this was not possible and LinTools would timeout attempting to connect.

1. Navigate to ProgramData\Eurotherm\PAC\LIN\Ports.
2. Click on the port folder (Port*x* where *x*=1-4) that applies to the Modbus port.
3. Edit the Network.unh file and add the following two lines to the bottom of the file.

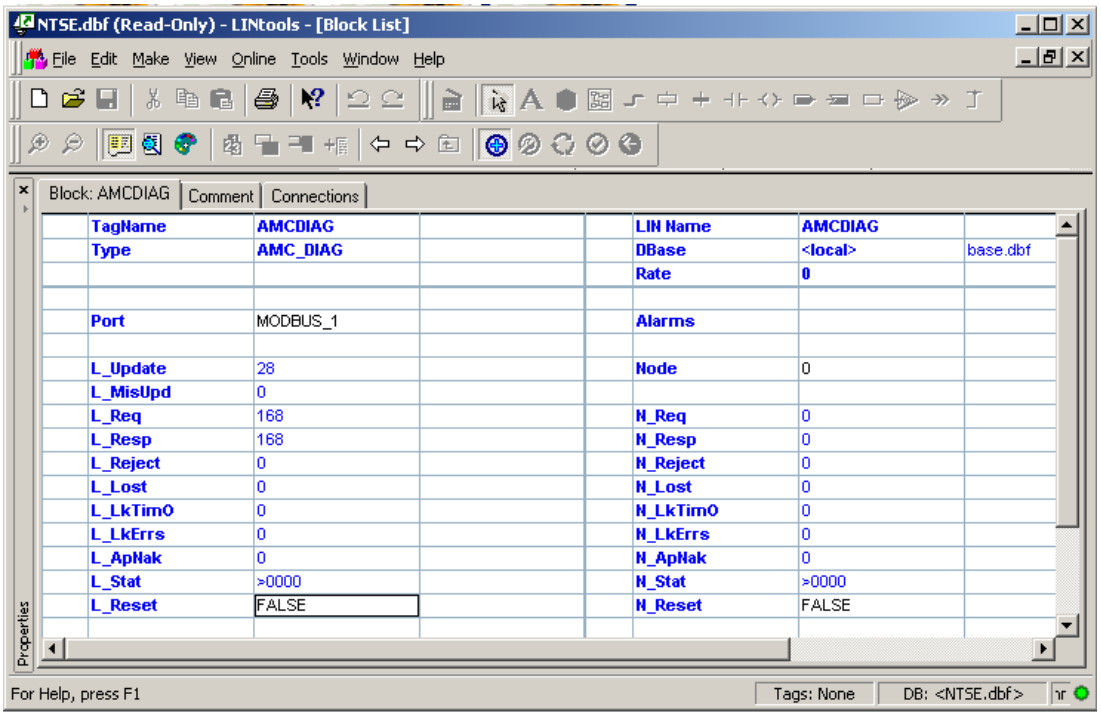
```
[LIN]
Node=1
```



4. To confirm the change – double click the NTSE.dbf to run LINtools.
5. Press the blue connect button.



6. Once connected, select the AMCDIAG block.



TagName	AMCDIAG		LIN Name	AMCDIAG	
Type	AMC_DIAG		DBase	<local>	base.dbf
			Rate	0	
Port	MODBUS_1		Alarms		
L_Update	28		Node	0	
L_MisUpd	0				
L_Req	168		N_Req	0	
L_Resp	168		N_Resp	0	
L_Reject	0		N_Reject	0	
L_Lost	0		N_Lost	0	
L_LkTimO	0		N_LkTimO	0	
L_LkErrs	0		N_LkErrs	0	
L_ApNak	0		N_ApNak	0	
L_Stat	>0000		N_Stat	>0000	
L_Reset	FALSE		N_Reset	FALSE	

7. As with the console window if communication is good the L_Req and L_Resp should be approximately the same value.

Note: The change to the Network.unh file has not been consolidated into the release. If the port configuration is changed via the LINOpc applet the modification will be lost.

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Eurotherm Ltd
Faraday Close
Durrington
Worthing
West Sussex
BN13 3PL
Phone: +44 (0) 1903 268500
www.eurotherm.co.uk

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