

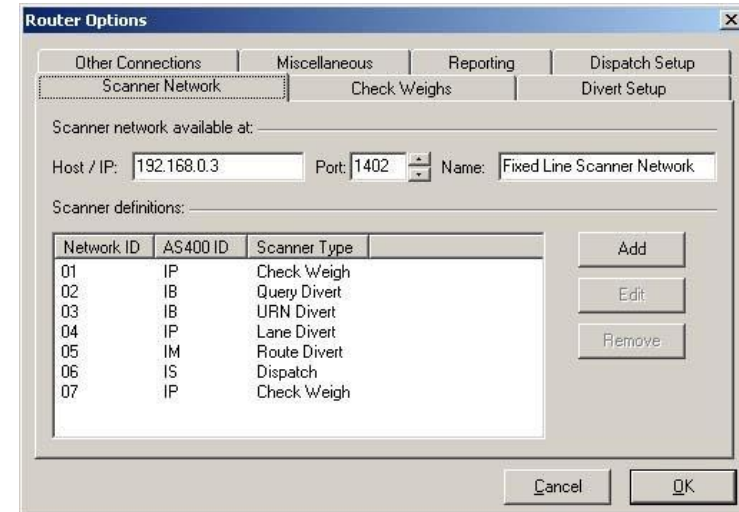
Pearson Education's I/T department had a need to carry out as much in house support on their order picking and packing conveyor system as possible, they wanted the flexibility to make configuration changes to the system on a day to day basis if required.

They also wanted to be able to carry out disaster recovery without needing to call on a third party. Axiom redeveloped the operating and control software for the site Implementing all of the software changes using Delphi, under Windows 2000.

Several processes were created, including :-

- \$ Connectivity to a range of online automatic barcode readers to capture carton barcode information and routing data.
- \$ Interfaces with three check weigh machines for dynamic carton weighing.
- \$ Interfaces with Pearson's AS400 to move carton data from client to host and back again, this interface is near real time and uses some specially developed Delphi components to form the link over TCP/IP.
- \$ Interface with a Siemens S7-400 PLC over TCP/IP, the PLC software was also developed by Axiom.

The system was provided with full logging ability down to a carton level, a user interface so that users and the I/T department could see that the system is working correctly. Configuration is via a suite of menu driven user interfaces.



**Router Options**

Other Connections | Miscellaneous | Reporting | Dispatch Setup

Scanner Network | Check Weighs | Divert Setup

Scanner network available at:

Host / IP: 192.168.0.3 Port: 1402 Name: Fixed Line Scanner Network

Scanner definitions:

Network ID	AS400 ID	Scanner Type
01	IP	Check Weigh
02	IB	Query Divert
03	IB	URN Divert
04	IP	Lane Divert
05	IM	Route Divert
06	IS	Dispatch
07	IP	Check Weigh

Add Edit Remove

Cancel OK

As well as controlling the logical operation of the conveyor system (Axiom re-developed the PLC software). The system handles check weigh stations which are used to reject over, or under weight parcels. The system is instrumental in automatically printing invoices via the AS400 interfaces.

A packing area and final dispatch area are also controlled via Axiom's PLC and PC control software



**Router Options**

Scanner Network | Check Weighs | Reporting | Dispatch Setup

Other Connections | Miscellaneous | Reporting | Dispatch Setup

Delphi 400 Interface

Host / Address: ukmagw2-06071 Port: 1401 Name: Delphi 400 Interface

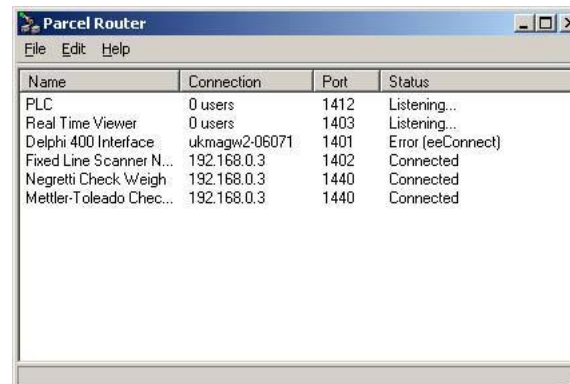
Real Time Viewer

Max. Connections: 5 Port: 1403 Name: Real Time Viewer

PLC

Max. Connections: 1 Port: 1412 Name: PLC

Cancel OK



**Parcel Router**

File Edit Help

Name	Connection	Port	Status
PLC	0 users	1412	Listening...
Real Time Viewer	0 users	1403	Listening...
Delphi 400 Interface	ukmagw2-06071	1401	Error (eeConnect)
Fixed Line Scanner N...	192.168.0.3	1402	Connected
Negretti Check Weigh	192.168.0.3	1440	Connected
Mettler-Toledo Chec...	192.168.0.3	1440	Connected