

Setting Up a Mailbox Network

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I'll start by giving you a semi-Biblical quotation: In the beginning, there was Teletext, and everybody looked on that as being the panacea for this problem of being able to communicate with word processors. That was a magic phrase back in the early '80's, and we waited. British Telecom gave us a presentation about how it was going to happen the next month, in fact it was due to appear in the beginning of the next year. In the following November's conference there was a further report on progress with something that was intended to supersede Teletext, or so it appeared to the ignorant, and there was some talk about a gateway that was needed to go through one system to another. And this gateway had yet another buzz word attached to it. At this stage I started to get confused. I knew what I wanted to do, I wanted to take a word processor text and I wanted to send it from my office to somebody else's office. I also wanted to receive texts from outside workers, bring them into my own office, do things with them, and then send them out in a different format, perhaps even on a different word processor program. Yet again, a problem of conversion.

Back in the early days of the mid-eighties, we tried communications by direct modem. Fraught with problems, things like seven bits and eight bits, and even parity and odd parity and all sorts of other wonderful terms. One or two people had an understanding of how these things worked and we did actually manage to set up some direct links that worked quite well most of the time. The problems came when you had things like difficulties with your mechanical switchgear which used to make crackling noises on the telephone line. It completely upset the communications routine. The Telecom engineers promised us that as soon as everywhere was digital that

problem would disappear. And now that the UK telephone network, or so we are assured, is all digital, supposedly that problem has disappeared. Except for one thing, I find that if I want to link up with somebody who is on a local dialling code, in other words somebody within a radius of say 10-15 miles of my office, they're not on the main network. They're on a local network and they're still using the old mechanical switchgear. However, don't despair, there is a way around that particular problem, and it's a little bit of useful guidance perhaps. If you dial the national code, even if it's for somebody who's in the next street to you, or even next door, you will use the main trunk lines to go through the switchboards to the exchange and you get a cleaner line than if you dial the local code.

As I say, we tried going through a direct modem link, and we were very happy. We were using synchronous communications because in those days it was the only thing that gave us the security of accuracy of the transmitted document, because there was a duplex transmission. It went out, it came back. The two were then sent back again and very, very simply they were compared at the other end, and if they were the same, then you got it through right. If not, you had an error message and the system re-transmitted it. That's perhaps oversimplifying it a bit.

So much of this particular path that I've tried to tread over the past decade has been well-intentioned blind alleys. You can see it happening in all sorts of other fields and it comes back to this question of standardisation. Look at video recorders, Philips 2000 systems, you can actually go two ways on a tape. You get 8 hours on one tape at normal speed. That system is now antiquated and you very rarely find it. Synchronous communication is another typical blind alleyway. Like the plethora of word processing equipment that one could buy about the same time, they all did the job wonderfully and everybody extolled the virtues of their particular system – but they couldn't talk to each other. You couldn't take one disc out and put it into another one. You couldn't do anything except rely on this wonderful idea of ASCII.

The next thing that we considered doing was to change over to asynchronous communications and we tried that, but again there were problems. What speed are you going to choose, how are you going to do it, 7 bits, 8 bits, again much more technological mumbo-jumbo. All I want to do is to get one message from here to there! Stop trying to confuse me and just tell me how to do it. The problem was that on a one-to-one link, if you were trying to set something up with a local terminal and a remote terminal, you had the problem of making that connection, and then somebody else comes and says I want to do it as well. So you then have the problem of setting up a direct link with them. We came across the idea of the Dialcom mailbox. It had been promoted and it had seemed like a good idea: you set up your connection with this central mailbox computer, so you only had to set up one connection. Your destination address, or

originator, if they were sending in to you, was in exactly the same situation; there was only one connection that they had to make.

It had another advantage, which was a practical one, and it was connected a little bit with security as well. You don't want to leave your system open so that anybody can get in at any time, because you never know what they might want to do. They might find out all your dread secrets. They might give you a virus, and you don't want to catch a cold that way. So the advantage of a mailbox system of this particular kind was that it enabled you to set up your communications link with reduced problems if your translator, for instance, was going out to a party and not going to finish the text until 2:00 or 3:00 in the morning. Forget the question of quality at that stage, I'm thinking of the communication side. The text could come back to you before he or she went to bed and it would be there ready for you in the morning to download into your mailbox without having to wake the translator up and suffer the problems of trying it at an early stage in the morning. So there was this unattended ability as well.

However, there was another problem. It was O.K. for basic text, because the Dialcom network would only support the first 128 characters, the basic ASCII code. That meant you couldn't transmit anything except an ordinary text. The accented characters are extended ASCII, the next 128. We did discover that if you had a corporate network you could have a wonderful thing they called FT or File Transfer. Yet another buzz word because what it did with your text was to convert the ASCII code characters into expanded hexadecimal code, which means that they're using letters and numbers that are all in the basic code. So I could at last transmit a word processor file.

We invested in Dialcom network mailbox system, and offered it to any translators who wanted to come on to it because it seemed like an extremely good idea. But – two weeks after we signed the original agreement to take out the network subscription, FT was released on demand to anyone who had an individual mailbox. So, the fundamental reason to take it out in the first place was immediately superseded. Nothing daunted, we continued with the idea, and it still works. I have to say that it has been virtually unused over most of the time that we've had it, for all sorts of reasons, none of them technical.

The international side is equally possible. The packet switch stream or international data network does actually work not only in the UK but throughout Europe. I think I'm right in saying that most of the countries in western Europe are subscribers to the Dialcom network, which means that you have data quality line ability to connect throughout Europe and therefore in theory, you can have your remote locations throughout Europe and transmit your text to and from sources that are not in the UK.

However, if you remember, the title of the paper I was originally going

to present was how to set up a Dialcom network. Things have evolved yet further and now there is another type of software package available, BBS (bulletin board systems). These are essentially notice boards which you can attach electronically to your own word processor with modem connection, and it enables you to have the same remote link for news, views, comments, etc. If you communicate with them to the system operator, that's the system to which it's attached, you've effectively got a mailbox system of your own which you can attach to it. I know of one or two companies, some of whom are here, who have actually got their own bulletin board systems and use them as a home grown network. The attraction of this particular idea as distinct from the network that I was considering with Dialcom, are that it gives your firstly the same degree of security, and secondly the ability to handle your text unattended. There is a third advantage and that is a financial one, but I'll come back to that one in a moment.

Think of it in terms, for example, of half a dozen translation companies that wish to communicate one with another. With bulletin board in each of these local company terminals, you give everybody the ability to transmit texts to their own bulletin board system which they can then use for their own translator network. Security, speed, unattended operation, the financial benefit. You've got an investment cost of course, but at the end of the day the system would pay for itself in the savings that you have the investment in telecomms time.

Talking of investment in telecomms time, I would add the speed at which you do your transmission. If you transmit at 2400 band, the fastest speed which is currently available on most systems without a great deal of expense, then you're obviously going to transmit a lot faster than you would at 300. Your modem is going to cost you a lot more, but think of the amount of time you'll save in frustration and on your telephone charges.

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