Linux X.25 Project

As my third year dissertation at University I have taken it upon myself to write an X.25 implementation for Linux. My aim is to provide a complete X.25 Packet Layer and a LAPB module to allow for "normal" X.25 to be run using Linux. There are two sorts of X.25 cards available, intelligent ones that implement LAPB on the card itself, and unintelligent ones that simply do framing, bit-stuffing and checksumming. These both need to be handled by the system.

I therefore decided to write the implementation such that as far as the Packet Layer is concerned, the link layer was being performed by a lower layer of the Linux kernel and therefore it did not concern itself with implementation of LAPB. Therefore the LAPB modules would be called by unintelligent X.25 card drivers and not by intelligent ones, this would provide a uniform device driver interface, and simplify configuration.

To confuse matters a little, an 802.2 LLC implementation is also possible which could allow X.25 to be run over an Ethernet (or Token Ring) and conform with the JNT "Pink Book", this would have a different interface to the Packet Layer but there would be no confusion since the class of device being served by the LLC would be completely separate from LAPB.

Just when you thought that it could not become more confusing, another option appeared, XOT. This allows X.25 Packet Layer frames to operate over the Internet using TCP/IP as a reliable link layer. RFC1613 specifies the format and behaviour of the protocol. If time permits this option will also be actively considered.

A linux-x25 mailing list has been created at vger.kernel.org to support the development and use of Linux X.25. It is early days yet, but interested parties are welcome to subscribe to it. Just send a message to majordomo@vger.kernel.org with the following in the message body:

subscribe linux-x25 end

The contents of the Subject line are ignored.

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