Simple guide to Communicator Wiring

General

A typical company has several rooms each with dual socket data wallports. These often have the left hand socket used for data and the right hand socket free. These wallports will be cabled using Cat. 5 or Cat. 6 underfloor cabling to the patch panel on that floor of the building. See fig 1.

In this case the Power over Ethernet (PoE) switch needs to be mounted in the patch panel rack and all PoE ports patched to the right hand socket of the appropriate wallports. The last PoE switch port then needs to be patched to the cabling which runs to the Comms Room.

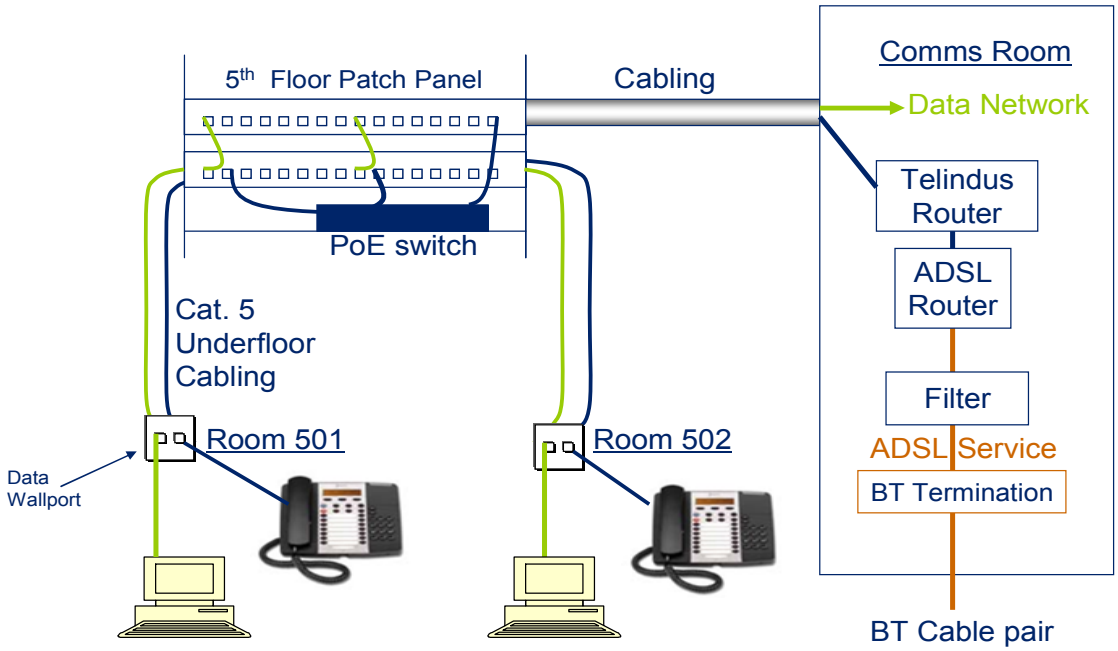

Fig. 1 Typical building wiring for data and IP phones. Data cabling shown in green, IP phone cabling shown in blue.

Site Survey

Before starting the survey, the proposed Tenant Administrator must be consulted, and perhaps the IT manager will want to be involved. Try to keep the IP telephony cabling separate from the data cabling, perhaps using different coloured patch cables for this purpose. Using the excel spreadsheet supplied, take a laptop to each room where a Communicator phone is to be used. Fill in the details for that room, showing the number of each type of device, and noting the reference number for the socket on the wallport which is to be used for data. If the socket is free for use, put a sticker against it on the wallport to show that it will be used for IP telephony.

Once each room's details have been completed, go to the Main Details page and fill in any other information required about the site. This page can then be printed and handed to the person who orders the Communicator using the Gamma portal.

Installation cabling and patching

At the Comms Room, the cable from the PoE switch needs to be patched to a LAN1 port of the Telindus 1221 router which is supplied by Gamma as part of the communicator solution. The LAN2 port of the Telindus router goes via the “Modem” socket of the filter to the BT termination point where the ADSL service is provided. See fig. 2

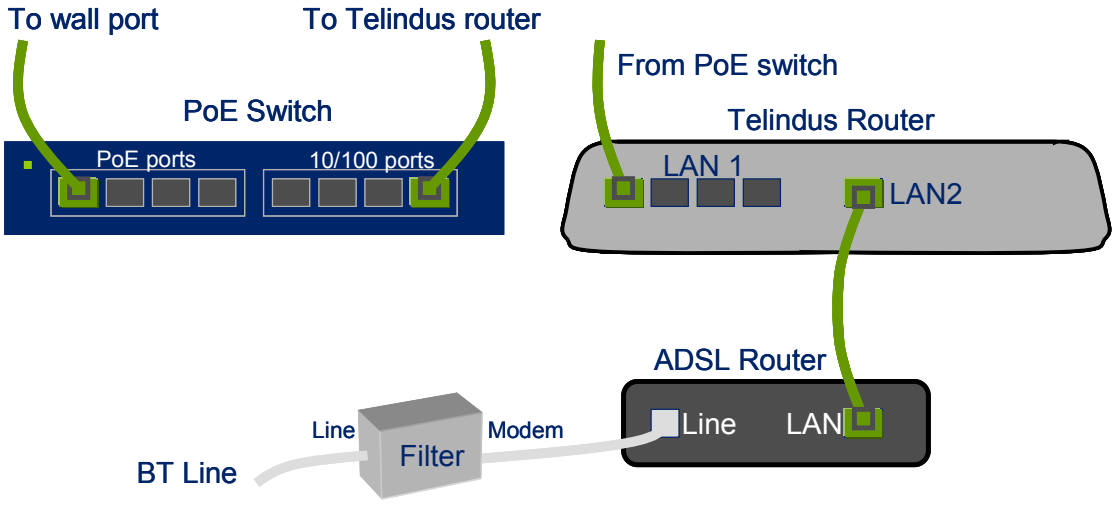

Fig. 2 PoE switch and Telindus router cabling. The Telindus router is supplied by Gamma Telecom, the ADSL router is supplied by the Channel Partner.

Each phone has three sockets marked using symbols for headset, handset and LAN. The Cat. 5 cable from the labelled wallport socket should go into the one with the LAN symbol.

The ADSL router on site should have UDP port 1701 open in both directions. The Telindus router normally has an IP Address of 192.168.0.254 unless the channel partner has requested on the order form that a different IP address be set up. Make sure that the ADSL router is set to another IP Address in the same range (same subnet).
Consult an IT technician if you are unsure of how to do this. Once the router and PoE switch are powered up, the phone’s display should read “DHCP Discovery”. If all is well, after about 2 minutes, the words “Downloading”, then “Activate” will appear. At this point the phone is ready to use.

Installation tips

- Remember to reject any patch cables which have a broken clip. These would prove unreliable if used. Use a particular colour of patch lead for the Communicator cabling and make this the same as the wallport label.
- On some sites the actual cable pair is not easy to identify. Use an analog phone and filter on a new ADSL line to check the CLI by using it to call a mobile phone.
- If new cabling is required, it must be solid conductor Cat 5 or 6 cable meeting the requirements of TIA/EIA-568-B.