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The Global Dialling Scheme

An essential part of the configuration of the campus gatekeeper relates to the implementation of the GDS (Global Dialling Scheme). E.164 is an ITU-T (International Telecommunication Union – Technical) recommendation (or standard) which defines the international public telecommunication numbering plan used in the PSTN (public subscriber telephone network), and some other data networks. An addressing scheme (or dial plan) that adheres to E.164 has been implemented on the JANET network (and other NRENs (National Research and Educational Networks) around the world) to support international H.323 services. Implementation of this addressing scheme is mandatory for participation in the Janet Videoconferencing-IP (JANET Videoconferencing Service over IP). Directory services are part of a gatekeeper's role, and NRENs that are participating in this Global Dialling Scheme maintain a hierarchy of gatekeepers that act as interworking directory servers. Further information on this GDS can be found at:

http://www.wvn.ac.uk/support/h323address.htm [1]

In order to participate in the GDS, the local campus gatekeeper must be told the directory number of its own zone (which is loosely analogous to a local exchange code in the telephone system). The full E.164 number of a participating H.323 endpoint is composed of four elements: an international dialling prefix, which is specified as 00; the national code (44 for all gatekeepers in the UK); the zone number (a five digit number for JANET-connected organisations); and the endpoint number (usually three digits, but may be more). Use of three digits allows for up to 899 videoconferencing H.323 endpoints in each zone (or at each organisation), as the use of a leading 0 for endpoint numbers is not recommended.

On configuration, terminals should only be told their endpoint number, with which they will register with the gatekeeper. They will not be given the zone number, although the national, zone and endpoint numbers make up the full E.164 number of that endpoint. In the configuration examples below, Anytown College has been given the zone address of 0XXYY, and the first endpoint to be registered will be given the number 100. So its full E.164 address is made up of the four elements together: 00440XXYY100.

While it is only necessary to configure the terminal with its local E.164 extension, with most terminals it is also possible to configure the terminal using the full E.164 address and some administrators prefer to do this.

In the following configuration examples the actual addresses of the Janet Videoconferencing-IP directory gatekeepers have not been specified. The correct addresses will be supplied by the Janet Videoconferencing-MC on application. There are two of these directory gatekeepers currently in place on the JANET backbone in order to provide resilience to the GDS service.

Note that when dialling within a zone it is only necessary to use the terminal’s extension number, and not the full E.164 address.

Source URL: https://community-stg.jisc.ac.uk/library/janet-services-documentation/global-dialling-scheme

Links
[1] http://www.wvn.ac.uk/support/h323address.htm