

(Rapporteur's Group on part of Q.2&3/15)

Study Group 15 - CONTRIBUTION

Question: 2&3/15
SOURCE: IBM
Purpose: Discussion
TITLE: Transport Protocols for H.245 in H.310 Terminals

ABSTRACT:

The H.310 Draft Recommendation currently identifies the use of the OSI Transport stack to carry the H.245 and T.120 control protocols.

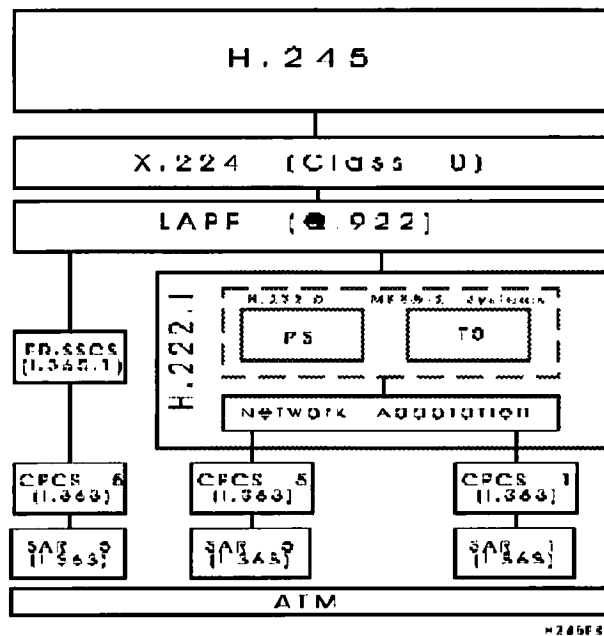
The T.120 Conference Control Standard supports a variety of different transport profiles for carrying the T.120 protocols. These are specified in the T.123 Recommendation. T.123 allows the use of TCP/IP to carry T.120. The LAN Conferencing Standard, H.323 allows the use of TCP/IP to carry both H.245 and T.120.

This contribution suggests the TCP/IP protocol stack be considered for transporting H.245 and T.120 in H.310.

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Using H.245 in H.310

The H.310 Draft Recommendation currently identifies the use of the OSI Transport stack to carry the H.245 control protocol. The following picture shows H.245's use of the OSI X.224 (Class 0) sitting on LAPF (Q.922) and using AAL5.

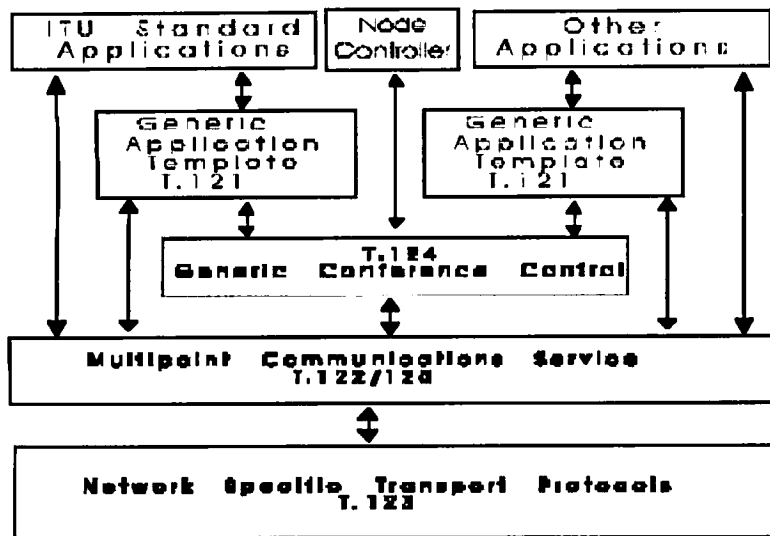


H.310 also recommends that the same protocol stack be used to transport the ITU T.120 Conference Control Protocol.

T.120 Recommendation

The T.120 Recommendation is depicted in the following figure.

T.120 Model



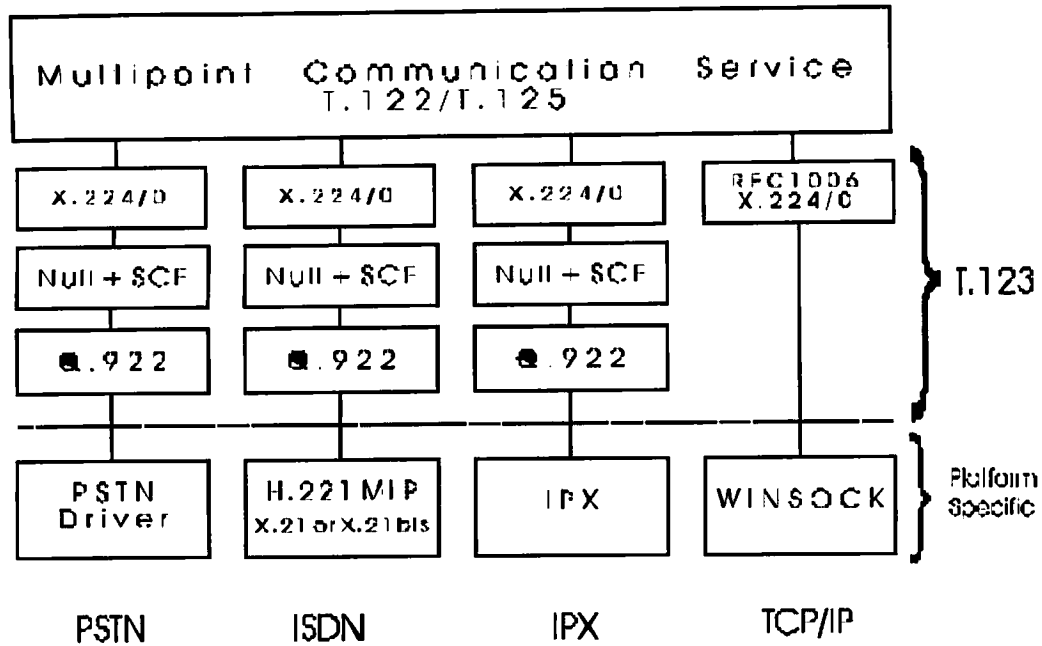
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T120REF

Applications use the services of the Generic Application Template (T.121), Generic Conference Control (T.124), and the Multi-point Communication Services (T.122/T.125) to perform conference related functions such as sharing data, conference admission (join/leave), multi-point data distribution, as well as controlling who speaks.

These functions sit on top of different transport protocols defined by the T.123 Recommendation. As depicted in the following figure, T.123 specifies transport profiles for a variety of different kinds of networks.

T.123 Profiles



T.123/95

T.123 defines transport stacks for each of the following:

- Public Switched Telephone Networks
- Integrated Services Digital Networks (ISDN)
- Circuit Switched Digital Networks
- Packet Switched Digital Networks
- TCP/IP (via reference profile)

The TCP/IP profile uses the IETF RFC 1006 to provide the X.224/0 level of support to T.120.

In addition to T.120, the H.323 Conferencing Standard also supports the TCP/IP stack for carrying the H.245 protocol.

Proposal

H.310 should consider the TCP/IP protocol stack for transporting H.245 and T.120.

References

- [1] ITU-T Recommendation H.245 (1995): "Control of communications between Visual Telephone Systems and Terminal Equipment".
- [2] ITU-T Recommendation T.120 (1994): "Transmission protocols for multimedia data"
- [3] ITU-T Recommendation H.310 (1996): "Broadband and audio-visual communications systems and terminal equipment".
- [4] ITU-T Recommendation H.323 (1996): "Draft Recommendation H.323: Visual Telephone Systems and Equipment for Local Area Networks Which Provide a Non-Guaranteed Quality of Service"