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SERIES Q: SWITCHING AND SIGNALLING

Technical Report TRQ.2830: ATM-MPLS network interworking signalling requirements

ITU-T Q-series Recommendations – Supplement 46

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Supplement 46 to ITU-T Q-series Recommendations

Technical Report TRQ.2830: ATM-MPLS network interworking signalling requirements

Summary

This Supplement provides the signalling requirements to enable ATM services to be provided over an MPLS network in a network interworking environment.

Source

Supplement 46 to ITU-T Q-series Recommendations was agreed by ITU-T Study Group 11 (2001-2004) on 12 September 2003.

FOREWORD

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1 Scope

MPLS has the potential to consolidate service provider networks and services, for example, ATM, Frame Relay (FR), circuit emulation, voice and IP services, over a single common core infrastructure. This Supplement provides a general overview of ATM-MPLS network interworking and defines the signalling architecture and requirements.

The scope is indicated in Figure 1.

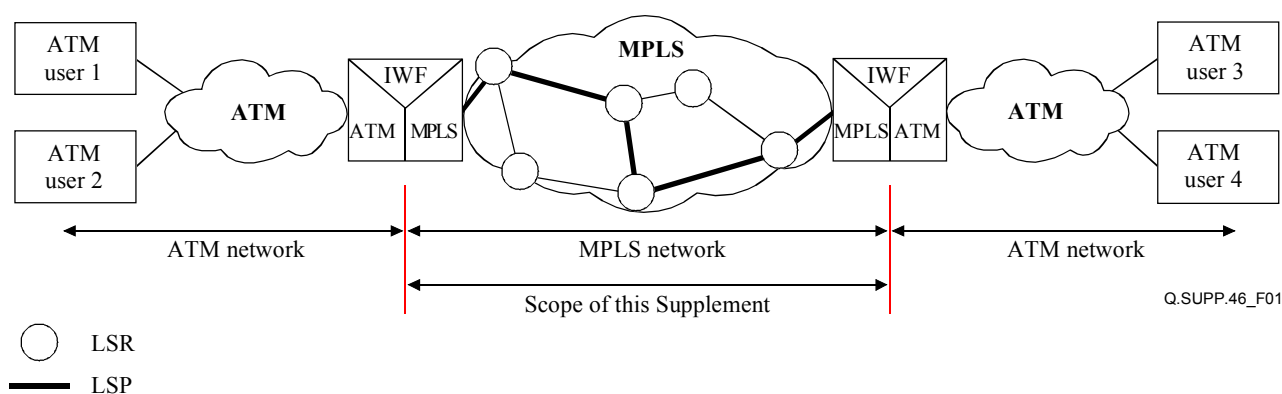


Figure 1 – Reference network architecture for ATM-MPLS network interworking and scope of this Supplement

Initially, point-to-point and point-to-multi-point ATM connections are covered. Other connection types are for further study. For point-to-multi-point connections it is assumed that the replication point is at or beyond the succeeding IWF.

2 References

- [1] IETF RFC 3031 (2001), *Multiprotocol Label Switching Architecture*.
- [2] ATM Forum Specification af-aic-0178.000 (2001), *ATM-MPLS Network Interworking Version 1.0*.
- [3] ITU-T Recommendation Y.1411 (2003), *ATM-MPLS network interworking – Cell mode user plane interworking*.
- [4] ITU-T Recommendation Y.1412 (2003), *ATM-MPLS network interworking – Frame Mode User plane interworking*.

3 Definitions

This Supplement defines the following terms:

- 3.1 signalling objects:** The description of one of the characteristics of an ATM call/connection or of an MPLS LSP.
- 3.2 cell concatenation:** See ITU-T Rec. Y.1411 [3].
- 3.3 interworking:** See ITU-T Rec. Y.1411 [3].