

I n t e r n a t i o n a l T e l e c o m m u n i c a t i o n U n i o n

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Y.1720
Amendment 1
(08/2005)

SERIES Y: GLOBAL INFORMATION
INFRASTRUCTURE, INTERNET PROTOCOL ASPECTS
AND NEXT-GENERATION NETWORKS

Internet protocol aspects – Operation, administration and
maintenance

Protection switching for MPLS networks
Amendment 1

ITU-T Recommendation Y.1720 (2003) – Amendment 1



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ITU-T Recommendation Y.1720

Protection switching for MPLS networks

Amendment 1

Summary

This amendment recommends that LSPs be routed along disjoint paths to avoid a single point of failure.

Source

Amendment 1 to ITU-T Recommendation Y.1720 (2003) was approved on 22 August 2005 by ITU-T Study Group 15 (2005-2008) under the ITU-T Recommendation A.8 procedure.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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As of the date of approval of this Recommendation, ITU had received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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ITU-T Recommendation Y.1720

Protection switching for MPLS networks

Amendment 1

1) Clause 6 Principles

1.1) *Modify the 1+1 protection paragraph (i.e., the third paragraph) in clause 6 as follows:*

Change:

In the 1+1 architecture type, a protection LSP is dedicated to each working LSP with the working LSP bridged onto the protection LSP at the source of the protection domain.

To:

In the 1+1 architecture type, a protection LSP is dedicated to each working LSP with the working LSP bridged onto the protection LSP at the source of the protection domain.

NOTE – To avoid a single point of failure, the working LSP and the protection LSP shall be routed along disjoint paths.

1.2) *Modify the 1:1 protection paragraph (i.e., the fourth paragraph) in clause 6 as follows:*

Change:

In the 1:1 architecture type, a protection LSP is dedicated to each working LSP.

To:

In the 1:1 architecture type, a protection LSP is dedicated to each working LSP.

NOTE – To avoid a single point of failure, the working LSP and the protection LSP shall be routed along disjoint paths.

2) Clause 7.1.1.1 Application architecture of unidirectional 1+1 protection switching

Modify the third sentence of the 1+1 protection paragraph (i.e., the first paragraph) in clause 7.1.1.1 as follows:

Change:

The working traffic is permanently bridged to working and protection LSPs at the source of the protection domain.

To:

The working traffic is permanently bridged to working and protection LSPs at the source of the protection domain.

To provide 1+1 protection service between two nodes in a MPLS network, a pair of LSPs is established between them along disjoint paths.

3) Clause 7.1.1.2 Application architecture of unidirectional 1:1 protection switching

Modify the 1:1 protection paragraph (i.e., the last sentence of the first paragraph of clause 7.1.1.2) as follows:

Change:

The working and protection traffic is permanently merged at the sink of the protection domain.

To:

The working and protection traffic is permanently merged at the sink of the protection domain.

To provide 1:1 protection service between two nodes in a MPLS network, a pair of LSPs is established between them along disjoint paths.

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