

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Y.2252

(07/2012)

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

Next Generation Networks – Service aspects:
Interoperability of services and networks in NGN

Identification and configuration of resources for multi-connection

Recommendation ITU-T Y.2252

ITU-T Y-SERIES RECOMMENDATIONS

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

GLOBAL INFORMATION INFRASTRUCTURE

General	Y.100–Y.199
Services, applications and middleware	Y.200–Y.299
Network aspects	Y.300–Y.399
Interfaces and protocols	Y.400–Y.499
Numbering, addressing and naming	Y.500–Y.599
Operation, administration and maintenance	Y.600–Y.699
Security	Y.700–Y.799
Performances	Y.800–Y.899

INTERNET PROTOCOL ASPECTS

General	Y.1000–Y.1099
Services and applications	Y.1100–Y.1199
Architecture, access, network capabilities and resource management	Y.1200–Y.1299
Transport	Y.1300–Y.1399
Interworking	Y.1400–Y.1499
Quality of service and network performance	Y.1500–Y.1599
Signalling	Y.1600–Y.1699
Operation, administration and maintenance	Y.1700–Y.1799
Charging	Y.1800–Y.1899
IPTV over NGN	Y.1900–Y.1999

NEXT GENERATION NETWORKS

Frameworks and functional architecture models	Y.2000–Y.2099
Quality of Service and performance	Y.2100–Y.2199
Service aspects: Service capabilities and service architecture	Y.2200–Y.2249
Service aspects: Interoperability of services and networks in NGN	Y.2250–Y.2299
Numbering, naming and addressing	Y.2300–Y.2399
Network management	Y.2400–Y.2499
Network control architectures and protocols	Y.2500–Y.2599
Packet-based Networks	Y.2600–Y.2699
Security	Y.2700–Y.2799
Generalized mobility	Y.2800–Y.2899
Carrier grade open environment	Y.2900–Y.2999

FUTURE NETWORKS

Y.3000–Y.3499

CLOUD COMPUTING

Y.3500–Y.3999

For further details, please refer to the list of ITU-T Recommendations.

Recommendation ITU-T Y.2252

Identification and configuration of resources for multi-connection

Summary

Recommendation ITU-T Y.2252 describes the identification of resources given by different types of simultaneous connections at the user equipment (UE) side. The resource identifiers are required to be configured in order to achieve utilization and harmonization through interaction between the multi-connection UE and the multi-connection network.

History

Edition	Recommendation	Approval	Study Group
1.0	ITU-T Y.2252	2012-07-29	13

Keywords

Configuration, identification, multi-connection UE, resources.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). 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.

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure, e.g., interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

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, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database at <http://www.itu.int/ITU-T/ipr/>.

© ITU 2013

All rights reserved. No part of this publication may be reproduced, by any means whatsoever, without the prior written permission of ITU.

Table of Contents

		Page
1	Scope	1
2	References.....	1
3	Definitions	2
	3.1 Terms defined elsewhere	2
	3.2 Terms defined in this Recommendation.....	2
4	Abbreviations and acronyms	2
5	Conventions	3
6	Identification of resources and attributes for multi-connection.....	3
	6.1 Identification of resources	4
	6.2 Resource identifiers	6
7	Configuration of resource identifiers.....	7
	7.1 Relations between resource identifiers within each layer	7
	7.2 Relationship between resource identifiers and multi-connection functional entities	9
8	Resource identifiers in multi-connection network.....	11
	8.1 Introduction of resource IDs according to multi-connection scenarios.....	11
	8.2 Introduction of resource IDs according to multi-connection use cases.....	11
9	Security considerations	13
	Bibliography.....	14

Recommendation ITU-T Y.2252

Identification and configuration of resources for multi-connection

1 Scope

In the multi-connection environment, a user equipment (UE) can have various capabilities through the available resources (e.g., access network information, network prefixes, IP addresses, etc.) by maintaining simultaneous connections. To achieve these advantages at a multi-connection UE (MUE), these resources are required to be identified and handled at the UE side. This Recommendation relies on the multi-connection architecture [ITU-T Y.2027] to describe the relationship between resource identifiers at the MUE and the multi-connection functional architecture.

This Recommendation describes the identification of the available resources given by different types of simultaneous connections at the UE side. Resource identifiers are required to be configured in order to achieve efficient utilization and harmonization through interaction between the MUE and the multi-connection functional entities within the network. This Recommendation provides a way to relate these resources with the multi-connection framework in NGN.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

- | | |
|------------------|--|
| [ITU-T Q.1742.1] | Recommendation ITU-T Q.1742.1 (2002), <i>IMT-2000 references to ANSI-41 evolved core network with cdma2000 access network</i> . |
| [ITU-T X.200] | Recommendation ITU-T X.200 (1994), <i>Information technology – Open Systems Interconnection – Basic Reference Model: The basic model</i> . |
| [ITU-T Y.1221] | Recommendation ITU-T Y.1221 (2010), <i>Traffic control and congestion control in IP-based networks</i> . |
| [ITU-T Y.2012] | Recommendation ITU-T Y.2012 (2010), <i>Functional requirements and architecture of next generation networks</i> . |
| [ITU-T Y.2027] | Recommendation ITU-T Y.2027 (2012), <i>Functional architecture of multi-connection</i> . |
| [ITU-T Y.2091] | Recommendation ITU-T Y.2091 (2011), <i>Terms and definitions for next generation networks</i> . |
| [ITU-T Y.2201] | Recommendation ITU-T Y.2201 (2009), <i>Requirements and capabilities for ITU-T NGN</i> . |
| [ITU-T Y.2251] | Recommendation ITU-T Y.2251 (2011), <i>Multi-connection Requirements</i> . |