International Telecommunication Union

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Q.3941.2

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SERIES Q: SWITCHING AND SIGNALLING

Signalling requirements and protocols for the NGN –
Testing for NGN networks

**Network integration testing between SIP and
ISDN/PSTN network signalling protocols –
Part 2: Abstract test suite and partial protocol
implementation extra information for testing
proforma specification for SIP-ISDN**

Recommendation ITU-T Q.3941.2

ITU-T Q-SERIES RECOMMENDATIONS

SWITCHING AND SIGNALLING

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

Recommendation ITU-T Q.3941.2

Network integration testing between SIP and ISDN/PSTN network signalling protocols – Part 2: Abstract test suite and partial protocol implementation extra information for testing proforma specification for SIP-ISDN

Summary

Recommendation ITU-T Q.3941.2 specifies the abstract test suite (ATS) and partial protocol implementation extra information for testing (PIXIT) proforma specification for network integration testing (NIT) to verify the overall compatibility of SIP, ISDN and non-ISDN (PSTN) over the national or international ISDN networks. The ATS specification covers the procedures described in Recommendations ITU-T Q.1912.5 and ITU-T Q.699. For SIP- and SDP-specific terminology, reference shall be made to 3GPP TS 24.229 and RFC 3261 respectively.

History

Edition	Recommendation	Approval	Study Group
1.0	ITU-T Q.3941.2	2011-06-29	11

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 not 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/.

Recommendation ITU-T Q.3941.2

Network integration testing between SIP and ISDN/PSTN network signalling protocols – Part 2: Abstract test suite and partial protocol implementation extra information for testing proforma specification for SIP-ISDN

1   Scope

The present Recommendation is part 2 of a multi-part deliverable covering network integration testing between SIP and ISDN/PSTN network signalling protocols:

Part 1:   Test suite structure and test purposes for SIP-ISDN.

Part 2:   Abstract test suite and partial protocol implementation extra information for testing proforma specification for SIP-ISDN.

Part 3:   Test suite structure and test purposes for SIP-SIP.

Part 4:   Abstract test suite and partial protocol implementation extra information for testing proforma specification for SIP-SIP.

The present Recommendation specifies the abstract test suite (ATS) and partial protocol implementation extra information for testing proforma based on the test suite structure and test purposes defined in Recommendation ITU-T Q.3941.1.

The test suite structure and test purposes (TSS&TP) have been developed by the ETSI technical committee concerned with network integration testing between SIP and ISDN/PSTN network signalling protocols. The ATS is sometimes referred to in this Recommendation as "SIP-ISDN-Interworking ATS".

The test notation used in the ATS is TTCN-3.

The following test specification- and design considerations can be found in the body of this Recommendation:

* the overall test suite structure;
* the testing architecture;
* the test methods and port definitions;
* the test configurations;
* the design principles, assumptions, and used interfaces to the TTCN3 tester (system simulator);
* TTCN styles and conventions;
* the partial PIXIT proforma;
* the modules containing the TTCN-3 ATS.

Annex A of [ETSI TS 186 001-2] provides the partial protocol implementation extra information for testing (PIXIT) proforma of the ATS.

Annex B of [ETSI TS 186 001-2] provides the Testing and Test Control Notation (TTCN-3) part of the ATS.

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.

[ETSI TS 186 001-1]   ETSI TS 186 001-1 (2010), *Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Network Integration Testing between SIP and ISDN/PSTN network signalling protocols; Part 1: Test Suite Structure and Test Purposes (TSS&TP) for SIP-ISDN.*

[ETSI TS 186 001-2]   ETSI TS 186 001-2 (2009), *Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Network Integration Testing between SIP and ISDN/PSTN network signalling protocols; Part 2: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification.*

3 Endorsement

The text of [ETSI TS 186 001-2] was approved by ITU-T as the basis for Recommendation ITU-T Q.3941.2 as modified below.

4 Modifications

Page 4, Intellectual Property Rights

Delete the whole section.

Page 4, Foreword

Delete the whole section.

Page 5, Scope

Replace the whole clause with the following:

"1 Scope

See clause 1, Scope, of Recommendation ITU-T Q.3941.2."

Page 27, History

Delete the whole section.

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