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SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS

Broadband and triple-play multimedia services –
Advanced multimedia services and applications

**Architecture of a system for multimedia
information access triggered by tag-based
identification**

Recommendation ITU-T H.621



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Recommendation ITU-T H.621

Architecture of a system for multimedia information access triggered by tag-based identification

Summary

Recommendation ITU-T H.621 defines the system architecture for the multimedia information access triggered by tag-based identification on the basis of Recommendation ITU-T F.771, and serves as a technical introduction to subsequent definition of detailed system components and protocols. The services treated by this Recommendation provide the users with a new method to refer to the multimedia content without typing its address on a keyboard or inputting the name of objects about which relevant information is to be retrieved. This is one of the major communication services using identification (ID) tags such as radio frequency identifications (RFIDs), smart cards and barcodes. International standardization of these services will give a big impact to international multimedia information services using ID tags. It contains the functional model, its constituent components as well as its workflow. An appendix describes how this architecture realizes typical services.

Source

Recommendation ITU-T H.621 was approved on 6 August 2008 by ITU-T Study Group 16 (2005-2008) under Recommendation ITU-T A.8 procedure.

Keywords

Multimedia information access, tag-based identification.

FOREWORD

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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.

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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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Introduction

This Recommendation defines the system architecture for multimedia information access triggered by tag-based identification and serves as a technical introduction to subsequent specifications of detailed system components and protocols. It contains the functional model, its constituent components as well as its workflow. An appendix describes how this architecture realizes typical services.

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Recommendation ITU-T H.621

Architecture of a system for multimedia information access triggered by tag-based identification

1 Scope

This Recommendation defines the following issues to cover multimedia information access services triggered by tag-based identification as defined in [ITU-T F.771]:

- a functional architecture reference model with descriptions of corresponding elements;
- interface protocols between communication elements; and
- a generic work flow to support multimedia information access triggered by tag-based identification.

Moreover, this Recommendation describes implementation examples with work flows.

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 F.771] Recommendation ITU-T F.771 (2008), *Service description and requirements for multimedia information access triggered by tag-based identification*.

<http://www.itu.int/rec/T-REC-F.771>

3 Definitions

3.1 Terms defined elsewhere

This Recommendation uses the following terms defined elsewhere:

- 3.1.1 **ID resolution:** [ITU-T F.771].
- 3.1.2 **ID tag:** [ITU-T F.771].
- 3.1.3 **ID terminal:** [ITU-T F.771].
- 3.1.4 **identifier:** [ITU-T F.771].
- 3.1.5 **multimedia information:** [ITU-T F.771].
- 3.1.6 **multimedia information delivery function:** [ITU-T F.771].
- 3.1.7 **real-world entity:** [ITU-T F.771].
- 3.1.8 **tag-based identification:** [ITU-T F.771].

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

- | | |
|----|-------------------|
| 2D | Two Dimensional |
| 3D | Three Dimensional |

3G	Third Generation wireless systems
CD	Compact Disk
DNS	Domain Name Server
DVD	Digital Versatile Disk
GW	GateWay
HTTP	HyperText Transfer Protocol
ID	Identification
IDR	Identification Resolver
IDT	Identification Terminal
IP	Internet Protocol
IR	Infrared
IRS	Identification Resolution Server
MIDF	Multimedia Information Discovery Function
MIDS	Multimedia Information Delivery Server
MIHF	Multimedia Information Handling Function
MIM	Multimedia Information Manager
MMS	Multimedia Messaging Service
NFC	Near Field Communication
NGN	Next Generation Network
P2P	Peer to Peer
PDA	Personal Digital Assistant
RF	Radio Frequency
RFID	Radio Frequency Identification
R/W	Reader/Writer
SB	Service Broker
SIM	Subscriber Identity Module
SMS	Short Message Service
URL	Uniform Resource Locator
WAP	Wireless Application Protocol
Wi-Fi	Wireless Fidelity

5 Conventions

In this Recommendation:

- The expression "**is required to**" indicates a requirement which must be strictly followed and from which no deviation is permitted if conformance to this Recommendation is to be claimed.