

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

F.743.8

(05/2019)

SERIES F: NON-TELEPHONE TELECOMMUNICATION
SERVICES

Multimedia services

Requirements for a cloud computing platform supporting a visual surveillance system

Recommendation ITU-T F.743.8

ITU-T F-SERIES RECOMMENDATIONS
NON-TELEPHONE TELECOMMUNICATION SERVICES

TELEGRAPH SERVICE

Operating methods for the international public telegram service	F.1–F.19
The gentex network	F.20–F.29
Message switching	F.30–F.39
The international telemesssage service	F.40–F.58
The international telex service	F.59–F.89
Statistics and publications on international telegraph services	F.90–F.99
Scheduled and leased communication services	F.100–F.104
Phototelegraph service	F.105–F.109

MOBILE SERVICE

Mobile services and multideestination satellite services	F.110–F.159
--	-------------

TELEMATIC SERVICES

Public facsimile service	F.160–F.199
Teletex service	F.200–F.299
Videotex service	F.300–F.349
General provisions for telematic services	F.350–F.399

MESSAGE HANDLING SERVICES

F.400–F.499

DIRECTORY SERVICES

F.500–F.549

DOCUMENT COMMUNICATION

Document communication	F.550–F.579
Programming communication interfaces	F.580–F.599

DATA TRANSMISSION SERVICES

F.600–F.699

MULTIMEDIA SERVICES

F.700–F.799

ISDN SERVICES

F.800–F.849

UNIVERSAL PERSONAL TELECOMMUNICATION

F.850–F.899

ACCESSIBILITY AND HUMAN FACTORS

F.900–F.999

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

Recommendation ITU-T F.743.8

Requirements for a cloud computing platform supporting a visual surveillance system

Summary

Recommendation ITU-T F.743.8 specifies the requirements for a cloud computing platform supporting visual surveillance. Cloud computing is an emerging technology aimed at providing various computing services over the Internet. Using virtualization technology, a cloud computing platform realizes a ubiquitous and flexible shared resources pool that can be rapidly provisioned and released with minimal management effort or service-provider interaction based on the needs of users. By using the cloud computing technology, the visual surveillance system can conveniently manage various functional components and services, such as video distribution, video transcoding and intelligent video processing. This Recommendation provides the application scenarios and requirements for a cloud computing platform supporting a visual surveillance system.

History

Edition	Recommendation	Approval	Study Group	Unique ID*
1.0	ITU-T F.743.8	2019-05-14	16	11.1002/1000/13898

Keywords

Cloud computing, requirements, scenarios, visual surveillance.

* To access the Recommendation, type the URL <http://handle.itu.int/> in the address field of your web browser, followed by the Recommendation's unique ID. For example, <http://handle.itu.int/11.1002/1000/11830-en>.

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/>.

© ITU 2019

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	1
	3.1 Terms defined elsewhere	1
	3.2 Terms defined in this Recommendation.....	1
4	Abbreviations and acronyms	1
5	Conventions	2
6	Scenarios.....	2
	6.1 Video distribution.....	2
	6.2 Video transcoding.....	2
	6.3 Online intelligent video processing.....	3
	6.4 Offline intelligent video processing	4
7	Requirements for cloud computing platform supporting visual surveillance.....	5
	7.1 User requirements.....	5
	7.2 Service requirements	5
	7.3 Security requirements	6
	7.4 Management requirements	7
	7.5 Scalability requirements	7
	7.6 Reliability requirements	8
	7.7 Performance requirements.....	8
	Bibliography.....	9

