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

Next Generation Networks – Service aspects: Service
capabilities and service architecture

Converged web-browsing service scenarios in NGN

Recommendation ITU-T Y.2235



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Recommendation ITU-T Y.2235

Converged web-browsing service scenarios in NGN

Summary

Recommendation ITU-T Y.2235 describes converged web-browsing (CWB) capabilities for NGN. CWB capabilities are based on web-based application support built on NGN release 1 (see Recommendation ITU-T Y.2201), with the aim to provide users with a consistent web environment which spans multiple network environments and multiple devices (PC, laptop, PDA, cell phone, etc.).

CWB provides advanced web-browsing capabilities in different NGN devices and various network environments, including profile-based content adaptation capabilities. The CWB capabilities enable client device (e.g., web browser) of NGN to browse web content effectively, regardless of device and network types.

This Recommendation identifies web-browsing capability requirements, provides a functional model and service scenarios making use of converged web-browsing capabilities.

Source

Recommendation ITU-T Y.2235 was approved on 13 November 2008 by ITU-T Study Group 13 (2009-2012) under Recommendation ITU-T A.8 procedure.

Keywords

Converged web-browsing (CWB), NGN, web-browsing.

FOREWORD

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Introduction

In NGN environments, web-based applications allow enhanced utilization of device capabilities and network characteristics [ITU-T Y.2201]. Web-browsing is one of the most popular web-based applications, and it is likely to be widely used in NGN environments.

In NGN environments, however, traditional web-browsing capabilities may indeed cause failure of a user's device, due to different types of devices (e.g., different screen size or resolution, etc.) and networks (e.g., roaming to different access network: CDMA, WLAN, WiMAX, Bluetooth, etc.).

To support the web-browsing capabilities in NGN environments, it is required to provide profile based web-browsing capabilities with content adaptation.

Converged web-browsing (CWB) capabilities enhance the web-browsing experience in terms of supporting different devices (e.g., mobile phone, smart phone, ultra mobile PC, laptop, etc.) and various access networks in NGN.

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Recommendation ITU-T Y.2235

Converged web-browsing service scenarios in NGN

1 Scope

The objective of this Recommendation is to describe converged web-browsing capabilities that transform the content according to the different device types of NGN terminals and various network environments supporting web-browsing capabilities. The web-browsing model and service scenarios, using such converged web-browsing capabilities, are also given.

The scope of this Recommendation is targeted at the converged web-browsing capabilities in NGN with its model and service scenarios. This Recommendation covers:

- Requirements to support converged web-browsing capabilities;
- Converged web-browsing functional model;
- Converged web-browsing service scenarios.

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 Y.2012] Recommendation ITU-T Y.2012 (2006), *Functional requirements and architecture of the NGN release 1*.
- [ITU-T Y.2201] Recommendation ITU-T Y.2201 (2007), *NGN release 1 requirements*.
- [ITU-T Y.2701] Recommendation ITU-T Y.2701 (2007), *Security requirements for NGN release 1*.

3 Definitions

3.1 Terms defined elsewhere

This Recommendation uses the following terms defined elsewhere:

3.1.1 content transformation function: A function that has capabilities to perform restructuring, recording and optimizing content. [b-W3C CTG 1.0].

NOTE – Content transformation function is used for providing content adaptation capabilities in this Recommendation.

3.1.2 proxy: A software that receives HTTP requests and forwards that request toward an origin server (possibly by way of an upstream proxy) using HTTP. A proxy receives the response from the origin server and forwards it to the requesting client. [b-W3C CC/PP structure and Vocabularies 2.0].

3.1.3 user agent: A client within a device that performs rendering. Browsers are examples of user agents. [b-W3C GTDI].