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SERIES J: CABLE NETWORKS AND TRANSMISSION
OF TELEVISION, SOUND PROGRAMME AND OTHER
MULTIMEDIA SIGNALS

Secondary distribution of IPTV services

**Messages and protocols enabling target content
distribution for integrated broadband cable
networks**

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Draft New Recommendation ITU-T J.707 (J.target-dist)

Messages and protocols enabling target content distribution for integrated broadband cable networks

Summary

This Recommendation defines the messages and protocols used to realize the target content distribution for integrated broadband cable networks. The target content distribution is the mechanism for content distribution addressed to specific target users. This Recommendation defines message format and delivery protocol between content providers/Ad providers and the platform.

1. Scope

This [draft] Recommendation defines the messages and protocols used to realize the target content distribution carried out on a delivery platform for integrated broadband cable networks. The target content distribution is the mechanism for content distribution addressed to specific target users according to a set of distribution policies and specific interactive feedback between content providers/Ad providers and the platform. Assumed services are target advertisement video insertion, target application insertion, and content recommendation.

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 J.704] ITU-T Recommendation J.704 (Dec, 2009), "Functional requirements of the service provider interface for television primary and secondary distribution and associated interactive services"

[ITU-T J.706] ITU-T Recommendation J.706, "The overview of target content distribution"

3. Definitions

3.1. Terms defined elsewhere:

LinearTV [b-Y.1901]: A television service in which a continuous stream flows in real time from the service provider to the terminal device and where the user cannot control the temporal order in which contents are viewed.

Enhanced Broadcasting [b-J.700]: A system that is capable of delivering broadcast programs over existing secondary distribution networks composed of HFC or FTTx with enhancements by applications and/or services transferred over IP-enabled networks.

3.2. Terms defined in this Recommendation:

None.

4. Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

Ad	Advertisement
EPG	Electronic Program Guide
HTTP	HyperText Transfer Protocol
HTTPS	Secure HTTP
STB	Set Top Box
VOD	Video on Demand

5. Conventions

None.

6. Introduction

Target content distribution is a type of content distribution whereby the delivery platform automatically selects and/or recommends the best content corresponding to the delivery policy, content information, and user information. This would be applicable, but not limited to, the following services:

- Target advertisement video insertion for VOD/linear TV
- Target application insertion for enhanced broadcasting
- Content recommendation

Appendix I of [ITU-T J.706] shows these services in detail.

To realize target content distribution services, the following interactions are necessary between the service provider and the delivery platform.

Target Content Distribution Policy Notification: This message is sent from the service provider to the target content distribution function of the platform. It includes target region/user information, desired content distribution method (e.g. content will be played at the beginning of the VOD service), content delivery schedule, and so on. Section 7.2 defines the message in more detail.

Target Content Distribution Report Notification: This message is sent from the delivery platform to the service provider. The purpose is to report the result of target content distribution services. Section 7.3 defines the message in more detail.

Figure 1 shows the architecture for target content distribution defined in [ITU-T J.706]. In actual service, content providers/Ad providers initially send the target content distribution policy to the delivery platform at first. Then, corresponding to the policy, the content decision function selects and/or recommends the best content and indicates it to the content distribution function (Target Content Distribution Indication). The service measurement function gathers reports from each local content distribution function and sends the integrated report to content providers/Ad providers (Target Content Distribution Report).

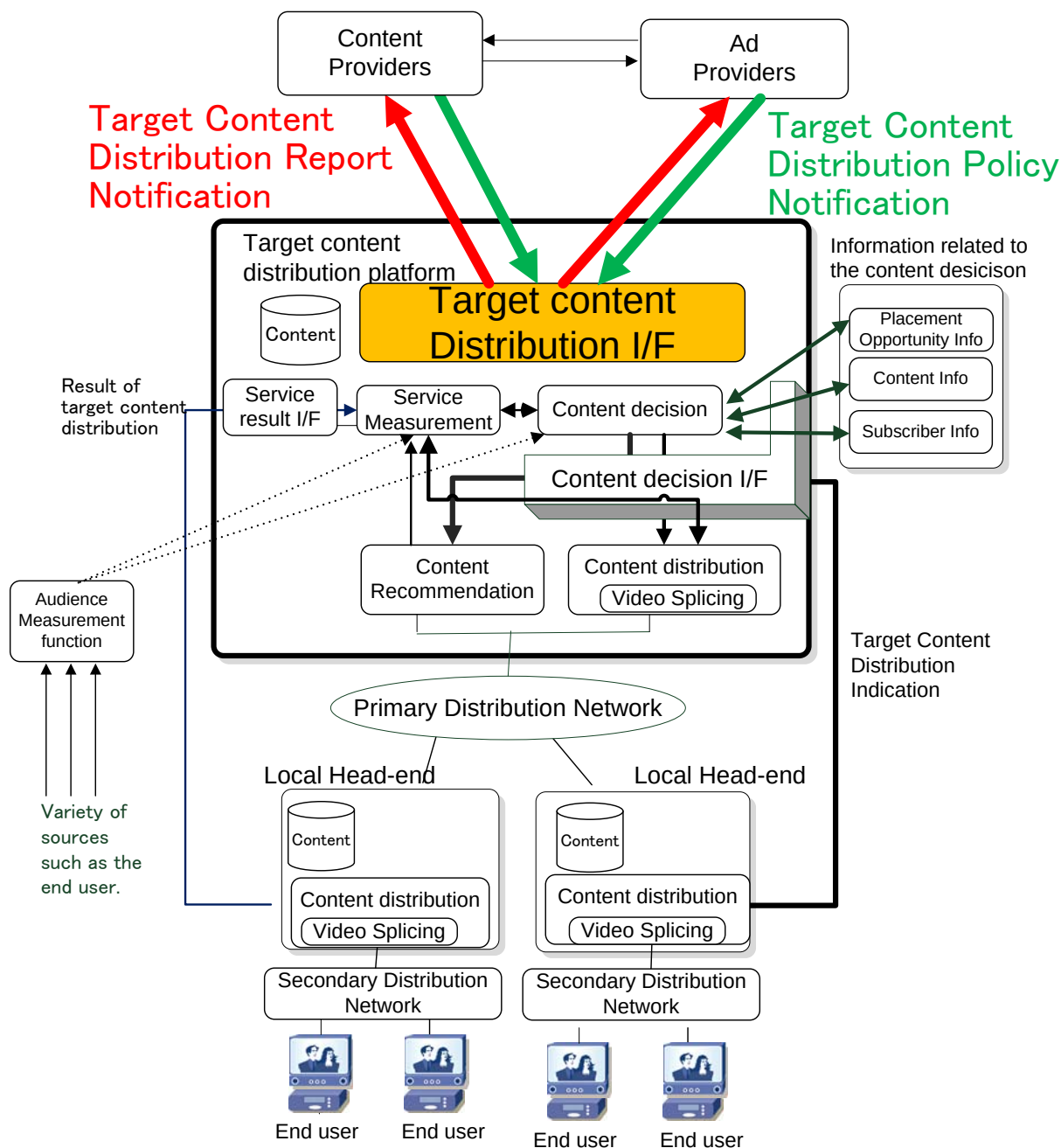


Figure 1: Target content distribution architecture

7. Messages and protocols for target content distribution

7.1. Message transfer protocol

The message transfer protocol should be generic and easy to handle for content providers/Ad providers. Therefore, widely-used message exchange protocols, such as HTTP [b-IETF RFC2616], HTTPs [b-IETF RFC2818], SOAP over HTTP(s) [b-W3C SOAP] are assumed.