



## Trends of Multimedia Transcoding Technologies

(Y.H. Jeong)  
(H.W. Jung)

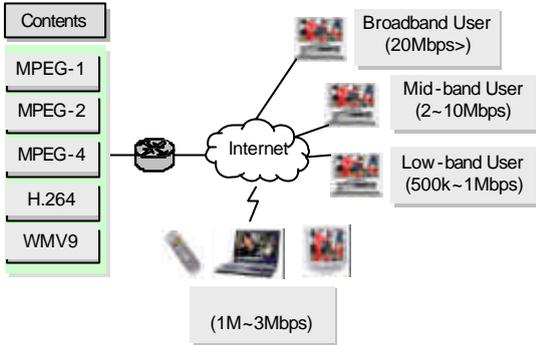
IP



가 가  
가  
가  
(multi-use)

### I.

MPEG-2 3 , MPEG-4  
2 가 H.264  
ITU-T ISO/IEC  
가 가 H.264/MPEG-AVC(Advanced Video Coding)  
[2]-[5].  
가 ,  
가 가 PC PDA,  
가 가 ,  
LAN,  
[1]. ADSL, VDSL,  
가 ,  
( ( 1) ).  
MPEG-1, 2  
ISO MPEG(Moving Picture Expert Group)  
가  
H.261, H.263  
ITU-T H.26x



( 1 ) / /

View in Drama | 방송 보기 \_ 다시보기

시청자 상담실 1:1 메일문의 동영상 관련 FAQ

게시물: 60

방송일	회수	부재	동영상	대본
20041010	60	해정의 조건 60회	56K 300K 700K	
20041009	59	해정의 조건 59회	56K 300K 700K	
20041003	58	해정의 조건 58회	56K 300K 700K	
20041002	57	해정의 조건 57회	56K 300K 700K	

( 2 ) KBS VoD



( 3 ) NTT VoD

( 2 ) KBS VoD

56K, 300K, 700K

[6].

MPEG-2 MPEG-4

( 3 ) NTT

VoD

Low, Mid High 3



( 4 ) VoD

(one - source)

가

가 . ( 4 )

(multi - use)

FAQ

가 가

( , 1M 500K

any network, any device, any contents

-  
 -  
 -  
 - IT

II.

1.

(digital convergence)

[1].

IT

(BcN)

(( 5)).

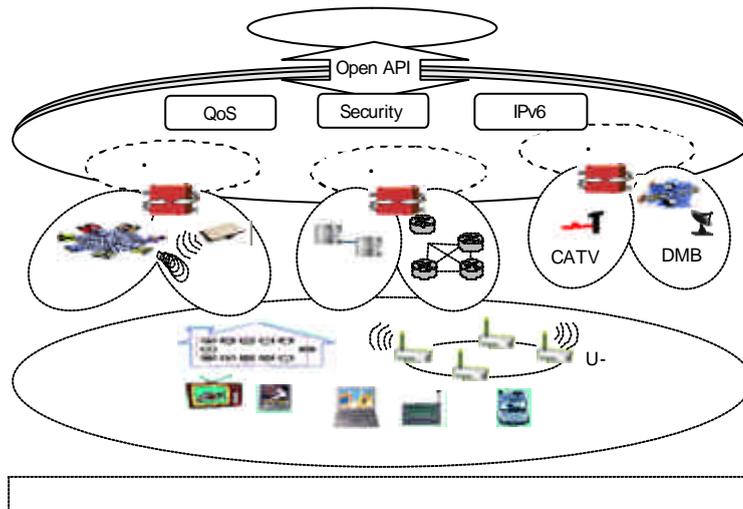
BcN

50

가 / /

(uni-

IT' versal media access) 가



( 5) BcN

< 1 >

(2.4kbps~9.6kbps)	(1.5~2Mbps)	(50~100Mbps)
?	?	? IT
?	? PC	? IT
?	? IT	?
?	?	?
?	? Stand Alone IT	?
1990	2000	2010

2.

가  
MPEG(Motion Picture Experts Group)

MPEG - 1, MPEG - 2, MPEG - 4, H.264/MPEG - 4 AVC(Advanced Video Coding) [2] - [5].

- MPEG - 1: 1991 ISO 11172  
CD - ROM

VHS  
1.5Mbps

CD CD - I/  
FMV , .mpg 가  
CD

- MPEG - 2: 1994 ISO 13818

MPEG - 1  
MPEG - 1 . 20Mbps  
TV TV  
DVD

- MPEG - 4:

10kbps

1998

가 가

- H.264/MPEG - 4 AVC:

MPEG - 2 3 , MPEG - 4 2  
가

MPEG - 26Mbps H.264  
1.5Mbps

DVD

CATV

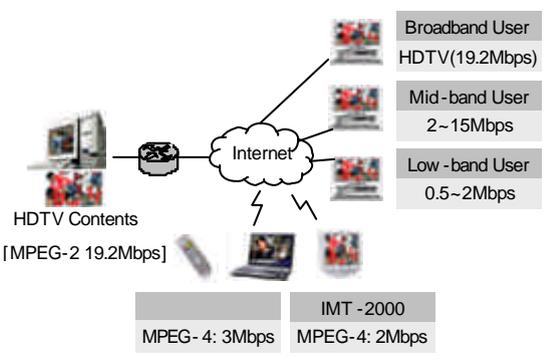
CP 가

가

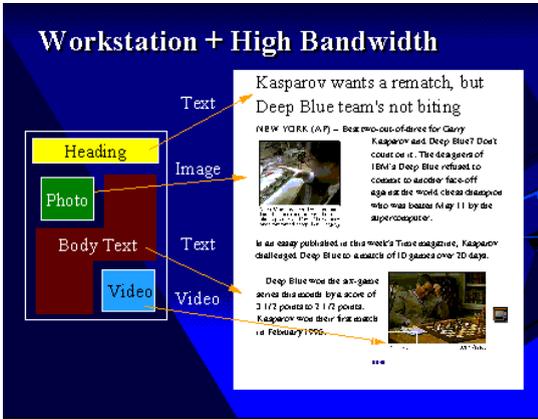
III.

- xDSL
- Cable Network
- Mobile Network
- WLAN
- Broadband Network

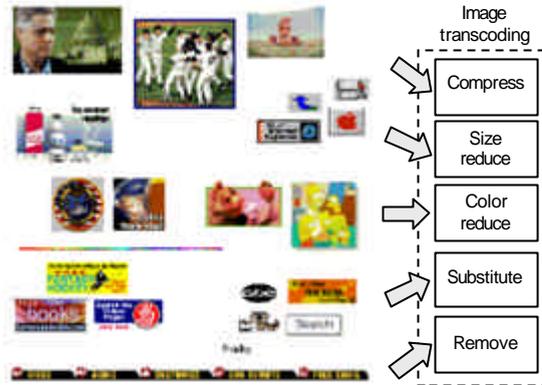
- PC HDTV  
 - PDA 가 ,  
 - Mobile Phone  
 -  
 •  
 - MPEG-1  
 - MPEG-2  
 - MPEG-4 MPEG-4  
 - H.264 PDA  
 MPEG-2 MPEG-4  
 ( 7)~( 9) , ,  
 가  
 (one - source) , [7]- [10].  
 ( 7)  
 (multi - use)  
 가  
 "one source multi - use" ( 8) ( 9)  
 , ( 8)  
 가 / / , 가  
 ( 6)  
 ( 9)  
 HDTV(20Mbps/  
 broadband network  
 MPEG - 2)



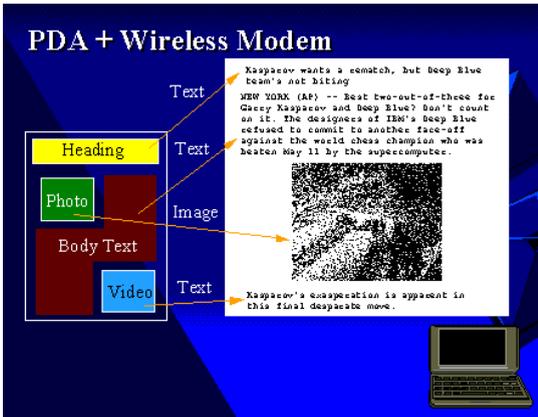
(substitution), (translation), (summarization),  
 (extraction) 4가 ( 10)  
 - :  
 ( 6)



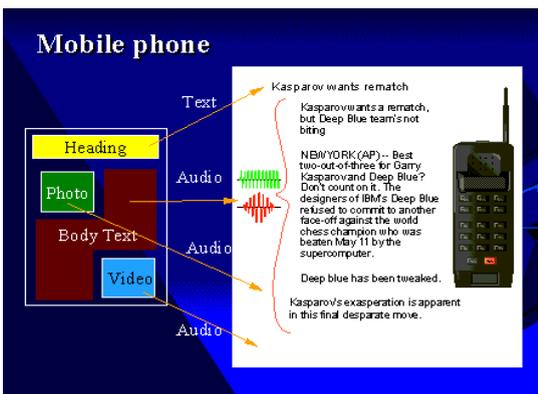
( 7) Workstation+High Bandwidth



( 10)



( 8) PDA+Wireless Modem



( 9) Mobile Phone

TTS(Text- to-Speech),

(mosaicking: video-

to - image)

가

IV.

1.

IBM ( 11) “ (universal multimedia access)”

PC, PDA,

가 (multi - use)

“one-source multi-use”  
 “Internet Transcoding for Universal Access”  
 WebSphere Transcoding Publisher가 [7] - [14].  
 WebSphere Transcoding Publisher

- : WML, HDML, mHTML, iMode

- :

Optibase

MGW2000/

5100 MPEG-2 MPEG-4 ISMA  
 2, MPEG-1, MPEG-4 WMT MPEG-4 ISMA

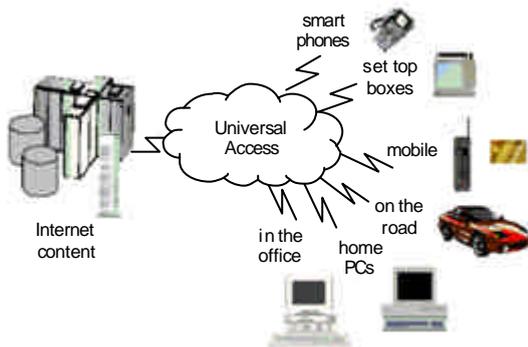
- 
- 
- 
- 

(( 12 ) ).

가

[15].

KDD 가 ( 13 )

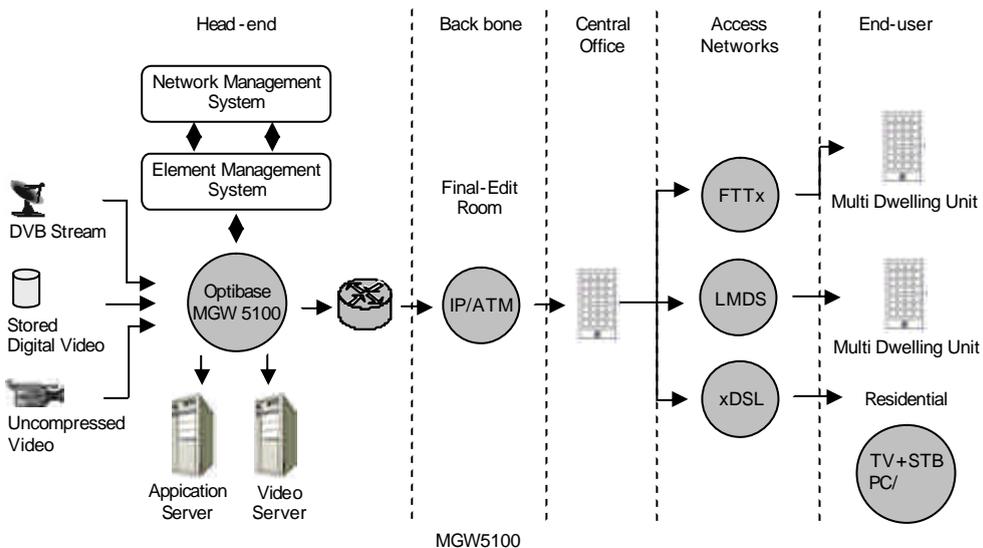


( 11) IBM Universal Multimedia Access

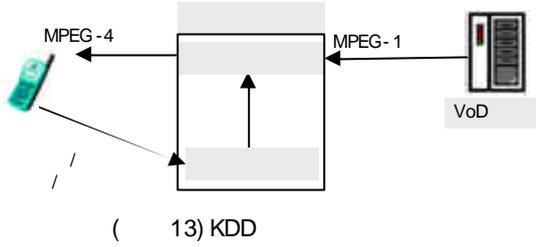
KDD

MPEG-1

MPEG-4



( 12) Optibase MGW5100



- HDTV  
- Bit rate (20Mbps~384kbps)

HDTV (( 15) ).  
SK IMT - 2000

2.

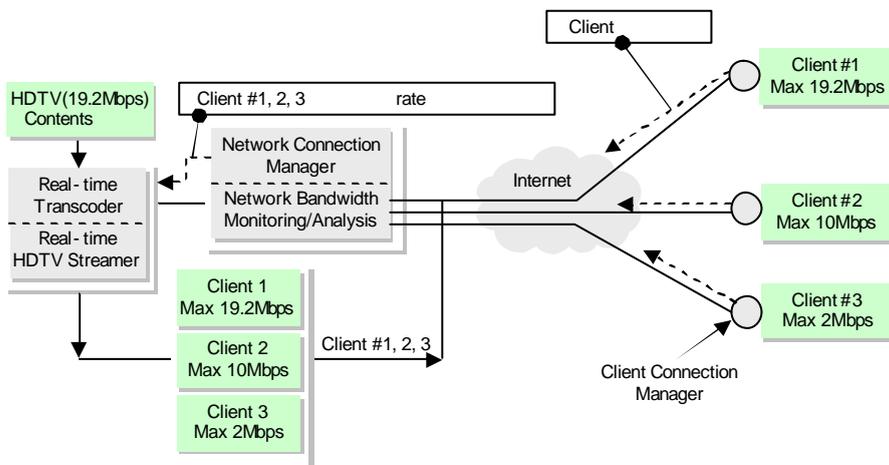
ETRI IP  
HDTV (20Mbps)  
384kbps bit  
rate ( 14)  
[16].



( 14)

(Unified Messaging System: UMS)

가



( 15) ETRI



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