

Use case of Channel API

(Use case for APIs
to access low level functionalities on TV devices)

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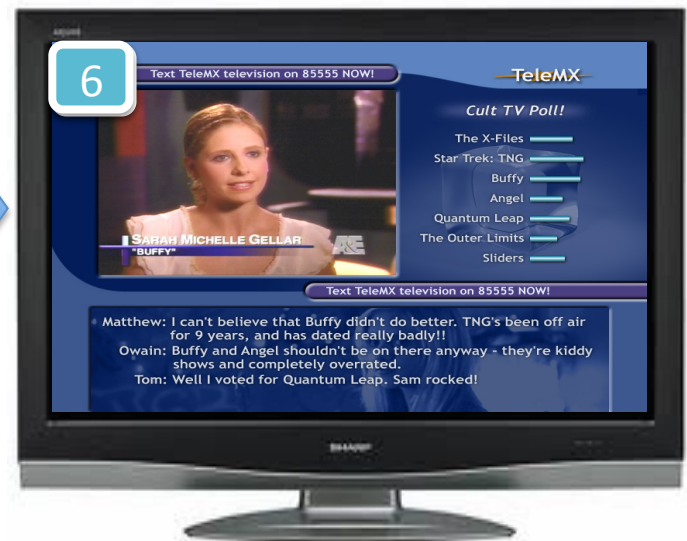
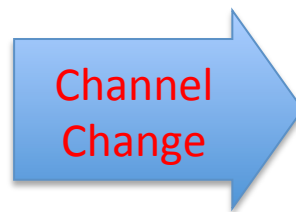
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Convergence Service

(change of the channel and the bounded contents)

- Web based convergence service [channel bounded service]
 - When user changes the channel, the broadcasting content and the corresponding contents/services should be displayed on the TV
 - channel up, channel down, channel set, etc.



Convergence Service

(change of the display area size)

- TV Screen will consist of the broadcasting content and related contents (e.g., information, applications, etc.).
 - broadcasting content can share the TV screen with other related contents
 - It shares the TV screen with related contents.
 - the window size of each content may be adjusted according to the related contents, user interface policy, and user preference.



Users change the window size of the broadcasting content

Requirement

- To support this use case, following APIs should be considered
 - tuning the channel
 - channel up/down
 - set channel
 - obtain the channel and program information
 - channel scan
 - get current channel information
 - get channel list
 - get current program information
 - get program list
 - the mechanism to adjust window size of the broadcasting content
 - set full screen
 - adjust (enlarge or curtail) the screen size

Requirement

- The development of API should adopt existing standards
 - <video> tag and Media Stream Interface
 - full screen API

Channel/Program Information

- channel information

attribute	Type	Description
major	unsigned char	major channel number (of current channel)
minor	unsigned char	minor channel number (of current channel)
programId	unsigned char	program identifier (of current channel)
tsId	unsigned char	transport stream identifier
channelName	DOMString	the name of channel
stream	MediaStream	the video stream as a source of HTMLVideo Element

Channel/Program Information

- Program Information

Attribute	Type	Description
title	DOMString	program title
startTime	unsigned long	program start time
endTime	unsigned long	program end time
desc	DOMString	the detailed description of the program
language	DOMString	language information of the program
programId	unsigned short	program identifier
rating	DOMString	program rating

Thanks!

