Interested in existing integration of Web technologies and broadcasting technologies

LiQun YU
Dragontec Shanghai Co.,LTD

Our interest:

We have concentrated our business on developing IPTV browsers for many years. Our research group is keeping of developing our series of digital TV Browsers fit the demands of wider international markets. Mastering those w3c based standardization techniques is our main research goal. We always concern carefully on W3C's effect on broadcast devices, expect to share our experiment and get suggestion from other profession.

We have interest to demonstrate series of our broadcasting browser products in the workshop, and the standardization aspects we have achieved. On the other hands, we feel like to know any web-base approaches involved by this workshop, which could promote the quality of various broadcasting service products. It could be a nice opportunity to interchange ideas with international participants.

Point of view:

We hope we could introduce kinds of browsers we have developed and developing for broadcast service below:

1. The product, BML browser we developed for Japanese market
2. IPTV browser, under ITU-LIME standard, which are in developing
3. The IPTV browser fits IPTV development situation in china

DragonTec. company has started to develop digital TV browser for international customs from 2004. Currently the main products of us, BML(broadcast markup language) browser is being sold in Japan. BML browser supports receiving digital broadcasting information within Japan area,

We mainly apply web technologies when developing our browser products. The designing of BML browser involves using XHTML presentation structure, and imbedding CSS/ECMAScrpit/DOM elements. The implementation of BML browser strictly follows Japanese ARIB standard, so that broadcasting and IV information are

received and operated through those standardized APIs.

The development of LIME browser according to ITU-H.762 standard is our next target. LIME contains very similar core structure(subset of HTML, CSS, DOM, and Javascript) compared with BML, according to the pre-publication of H.762 standard.
However, the LIME browser will contain more strong functional interfaces support IPTV broadcasting and IPVOD program. Our designing of LIME browser requires smarter integration of existing standardization techniques, especially on the interactive application level.

In today's China, IPTV market contains the largest amounts of potential customs. Various technologies of realizing IPTV service are based on HTML browsers. They support HTTP and DSMCC protocol, but also have CSS and Javascripts structure. A documentation standard (CMMB standard) lead to a unified digital TV broadcasting system is coming soon. Under this situation, a new standardized IPTV browser supporting future Chinese IPTV broadcasting system becoming highly demanded right now.
We have already jointed the organization for making CMMB standard. New CMMB standard basically follows the aspects of European MHP standard. To develop the IPTV browser fits for Chinese IPTV market, we will take MHP as the reference of standardization techniques. Regarding that CMMB standardized IPTV browser contains implementation of IPTV/IPVOD interface (as LIME) and Java CDC, we also refer the new standardization techniques from ITU-H.762.

From the experience of our development from BML browser to LIME browser (and IPTV browser fits TPTV-China), we believe that w3c technologies in interactive broadcasting application is a very promising research in the near future.