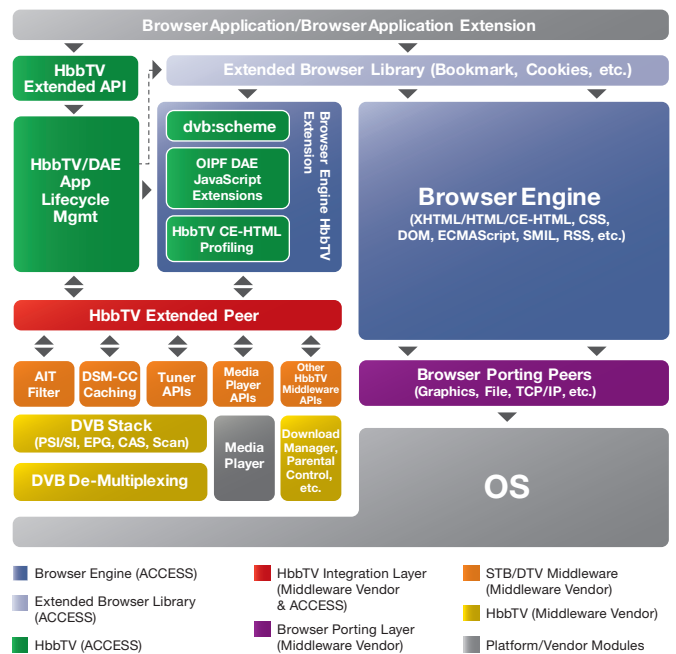


# NetFront™ Browser DTV Profile HbbTVEdition

## Market-Leading HbbTV Software Solution

NetFront™ Browser HbbTV Edition is a market-leading, extremely compact and platform-independent HbbTV software solution that enables device manufacturers, OEMs, middleware companies and operators to quickly and affordably launch or upgrade HbbTV capable devices and services. The solution is based on the hugely successful ACCESS NetFront Browser™, which is the most advanced and versatile full Internet HTML5 browser for digital TVs, set-top boxes and mobile devices. NetFront Browser is widely recognized as one of the leading browsers in the Smart-TV and game console markets worldwide.

As the key module in a complete HbbTV package, NetFront Browser HbbTV Edition presents and executes an interactive application that is an associated collection of documents (typically JavaScript™, CSS and HTML documents) as well as the content from the DSM-CC Object Carousel.



NetFront Browser HbbTV Edition Software Architecture

### Core Feature Highlights

- HTML5 (partial)
- CSS3 (partial)
- DirectConnect (Secure monitoring and control of devices from the browser)
- jQuery 1.4.x
- User Scripts
- SVG Viewer

### HbbTV Specifications

- JavaScript Extensions for the APIs defined in HbbTV (ETSI TS 102 796 V1.1.1)
- Extensions of CE-HTML Profiling
- New URI Scheme dvb://

#### JavaScript APIs

- Video/Broadcast Object
- Parent Ratings Scheme
- Configuration and Settings
- Content Download
- Streaming CoD
- Debug Print
- DRM Agent
- Time-Shift
- ChannelList/Channel
- DSM-CC Stream Event Listener
- XML AIT
- Scheduled recording
- Application Management
- Other Mandatory HbbTV JavaScript APIs

### CE-HTML Profiling

- Window/UIContentFrame Scripting Object
- “keypress” events
- CSS3 UI Directional Focus Navigation
- CSS3 Outline Properties
- Extensions of Audio/Video Objects
- Other mandatory Elements from CE-HTML Profiling

### Interfaces

- Access to DSM-CC Contents (integration needed with middleware DSM-CC client)
- Access to AIT (integration needed with middleware AIT filter)
- HbbTV Event Peer and Query & Command Peer
- Multimedia interface
- NetFront Browser Porting Peers

### Optional component(s)

- HbbTV Application Lifecycle Management (ALM)
- Natively integrated TV Widgets Engine
- BBC iPlayer v3 extension

### General Browser Specifications

#### General Browser Features

- HTML 5 (partial), HTML 4.01, XHTML 1.1, XHTML Basic, SMIL 2.1
- DOM Level 1, DOM Level 2
- CSS 1.0, CSS 2.0, CSS 3.0 (partial)
- ECMAScript (ECMA-262 3rd Edition)
- XMLHttpRequest (Ajax)
- HTTP 0.9/1.0/1.1
- SSL 2.0, SSL 3.0, TLS 1.0
- Crypto Modules
- IPv4/IPv6 Dual TCP/IP
- URI Schemes such as http:, https:, file:, etc.
- GIF87a, GIF89a, Animated GIF, JPEG, Progressive JPEG, PNG, MNG, BMP
- Cookies (Expires, Path, Domain, Name, Secure)
- US-ASCII, Shift JIS, EUC-JP, UTF-8/16, ISO-2022-JP, EUC-KR, ISO-8859-1, GB2312, Big5
- Graphic 24-bit RGB Color

## HTML5 Features

- Canvas
- Audio/Video/Source elements
- Geolocation
- WebStorage
- WebGL
- Session History
- Cross-document Messaging
- Application Cache
- Content Editable
- Forms
- scrollIntoView method
- Input Element
- Progress and other HTML5 elements
- Other HTML5 features

## CSS3 Features

- Opacity
- Nav
- Outline
- CSS3 UI: nav-up, nav-down, nav-left, nav-right
- Text-overflow
- DOM Range
- Multiple background image
- Border image
- Text shadow
- Box shadow
- Text stroke
- Border-radius
- Other CSS3 features

## Browser plug-ins

- Adobe® Reader® LE
- Document Viewer (Microsoft® Word, Excel®, PowerPoint®)
- Adobe Flash® / Adobe Flash Lite®

## Memory Requirements

- ROM: 5 – 7MB (Linux as reference)
- RAM: 2MB - (Depending on complexity of content viewed)

## Documents

- All the documents included in standard NetFront Browser SDK
- NetFront Extended Browser Library: Primer
- NetFront EBL Preference Guide
- NetFront HbbTV CE-HTML Support List
- NetFront HbbTV OIPF Support List
- NetFront HbbTV Peer API Specification (ALM as an optional section)
- NetFront Browser HbbTV Edition Porting Guide

## Supported CPUs

- ARM®
- XScale
- StrongARM®
- PowerPC
- MIPS®
- SH-Mobile and others
- X86

## NetFront™ HbbTV Viewer - HbbTV PC Emulator

### Documents

- NetFront HbbTV Viewer Functional Specification

### Operating Systems

- Windows® XP (32 bits and 64 bits)
- Windows 7 (32 bits and 64 bits)

### Minimum Hardware Requirements

- Pentium 233 MHz or greater
- 4 MB RAM or greater
- 12 MB hard drive space



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