



Interactive HD disc development



A compelling dynamic user experience finally on your tv set

Next gen optical disks are bringing to consumers more than one reason to be happily adopted; there's more than High Def, in those flashy blu disks, and it's called interactivity. At the core of any Blu-ray device, you'll find not only the latest technology with regard to a high-def multimedia experience (both video and audio) but also **a rocky environment based on java technology called BD-J that can exploit feedback, interaction and more entertainment..**



If you are interested in adding more value to your content, we can help you develop a service that bring to user a more deep experience.

You have bright ideas; let's bring them to life!

Avalpa offering for content producers

Avalpa has strong skills on interactive television both on the air (DVB) and over optical disks, so it's available to assist the content producers to exploit completely this new technology to deliver high-quality services to the end-user.

Our offering start with consultancy about potential business cases and design of solution architectures, then we could help over the full operational chain, like:

- **developing or customizing** interactive applications both for information or entertainment purposes
- **inserting adapting applications** to customer content for best disc master creation.
- **testing any application** on the main bulk of Blu-ray devices for quality assurance
- **hosting** in its service center the backend of any BD-Live applications (with stand alone reporting tools and/or integration with customer platforms)

Avalpa can develop **applications compatible** with **DVB MHP** environment for easy and integrated porting of content from disc to broadcast.

With this full set of tools, any content producer will find in Avalpa a single stop shop for her long term interactive disc production requirements.

Blu ray disk technology

Blu-ray Disc (also known as Blu-ray or BD) is an optical disc storage medium. Its main uses are high-definition video and data storage. The disc has the same physical dimensions as standard DVDs and CDs.

The name Blu-ray Disc is derived from the blue laser (violet-colored) used to read and write this type of disc. A two-layer Blu-ray Disc can store 50 gigabytes, almost six times the capacity of a two-layer DVD, or ten and a half times that of a single-layer DVD.

High-definition video may be stored on Blu-ray ROM discs with up to 1920x1080 pixel resolution at up to 60 frames per second.



A **Java Virtual Machine** environment is a mandatory feature of the Blu-ray specs. This Java Version is called BD-J and is a subset of the Globally Executable MHP (GEM) standard. GEM is the worldwide version of the Multimedia Home Platform standard. **Bd-live**, the so called BD-J Profile 2.0 is the most advanced version of the BD-J feature-set at it can provide Ip network facilities so the applications running inside the BD player can interact with remote server if the player is connected to internet.

The actual potential Blu-ray market

We can already count on [more the 15 millions](#) of Blu-ray players on the field. Three different kind of platforms can execute BD-J interactive applications:

- **Stand alone Blu-ray players** like Samsung BDP-2500 and similar equipment; they are the most cost effective equipment for this interactive platform and can cost as low as **150€** albeit with a fairly basic computing performance.
- **PS3 game console:** the new generation game console from Sony is a powerful Blu-ray player; we count this device as a peculiar environment as it accounts for the largest deployment (at least 10 million world wide) offering high performance in a carefully supported environment.
- **PC Software** Blu-ray players; this way a BD-J application can be compatible also with the PC environment. At least three vendors are providing a fully fledged interactive BD stack on the market (Corel, Cyberlink and Arcsoft); price are less then **100€** but these BD software players need a fairly long **quality assurance testing**.



Call to action, now

Avalpa is a dynamic company with an open mindset and willing to partner with creative people in the modern challenge to transform content in compelling experience with the bleeding edge technology in a simple way. Are you ready to start? Contact us freely at info@avalpa.com for demo or more info.

Main features

<i>BD-J for information and transaction services</i>	<i>BD-J for gaming and entertainment services</i>
<ul style="list-style-type: none"> ● Rapid development of advanced information services ● extensible XML browser for data ● synchronization between audio/video and info pages ● internet support for dynamic content or transactions ● easy man machine interface for data entry (user selectable on screen virtual keyboard or "SMS like" data entry on the remote) 	<ul style="list-style-type: none"> ● dynamic game platform with many different gameplay (engines) ● persistent memory for state saving along time ● network authentication & profiling for multiplayer mode ● high def audio and video: double buffering, true color ● adapt dynamically its complexity to box resources for optimal performance