Introduction to EDiCT

Digital TV in Europe is being deployed at an ever-increasing pace, with it comes the ability to enhance the viewers experience by enabling interaction with the programming.

The delivery of this interactivity requires sophisticated software platforms and MSO's throughout Europe have chosen a variety of solutions to fulfil their specific demands.
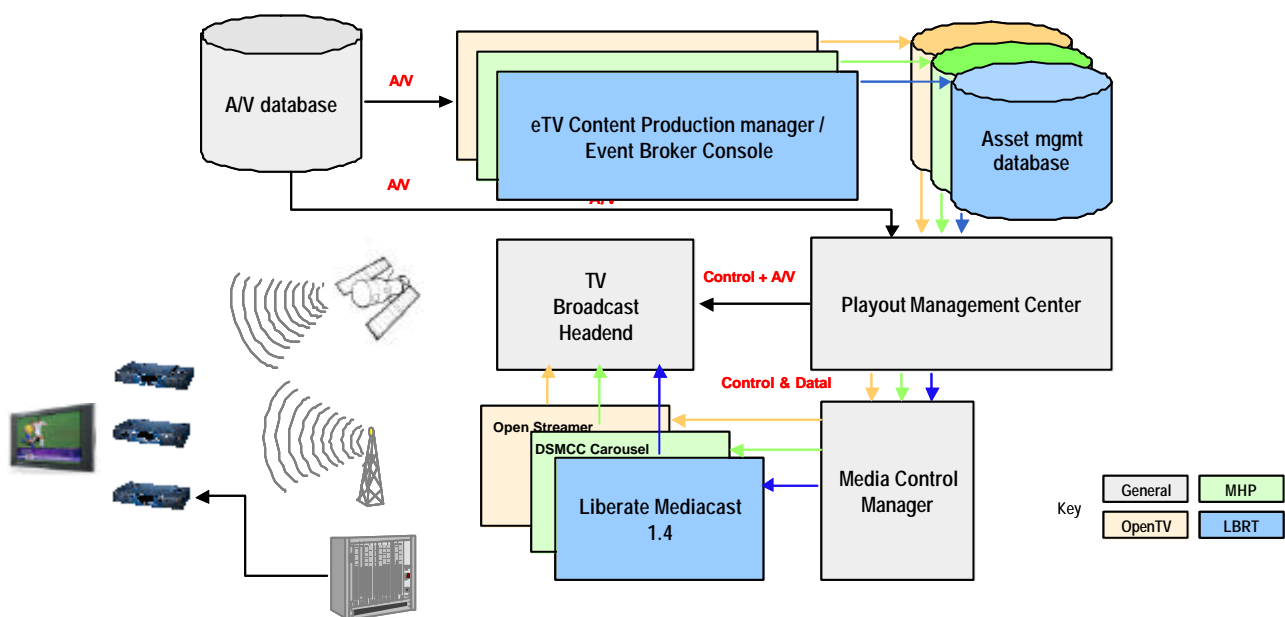
In Europe there are many middleware platforms including

- Liberate Technologies on cable
- OpenTV's on satellite
- A technology called MHEG on DTT
- iMagic on DSL
- Canal+ on cable

In the future, the DVB approved MHP standard will become increasingly used adding yet another platform.

The diversity of platforms being used to deliver interactivity causes significant problems for the broadcasters and producers. Consider a broadcaster wishing to deliver an interactive programme on cable, satellite and DTT. This will involve authoring for a variety of client middleware, to be broadcast on differing networks. The following diagram illustrates the steps involved for a broadcaster/production house to develop and deliver each eTV application.

To deliver this service the broadcaster needs to write the application and screens 3 times. They have to test 3 times and put it through 3 QA cycles for 3 different platforms.

The aim of EDiCT (Enhanced Development of Interactive Content for Television) is to reduce the time, effort and risk required to deploy enhancedTV services, thereby allowing a richer level of content to be deployed

EDiCT achieves this through a *unified production and broadcast workflow*. This encompasses application and content development through to management and delivery of such content. Throughout this process, EDiCT employs standard based tools and identifies a number of important user types.
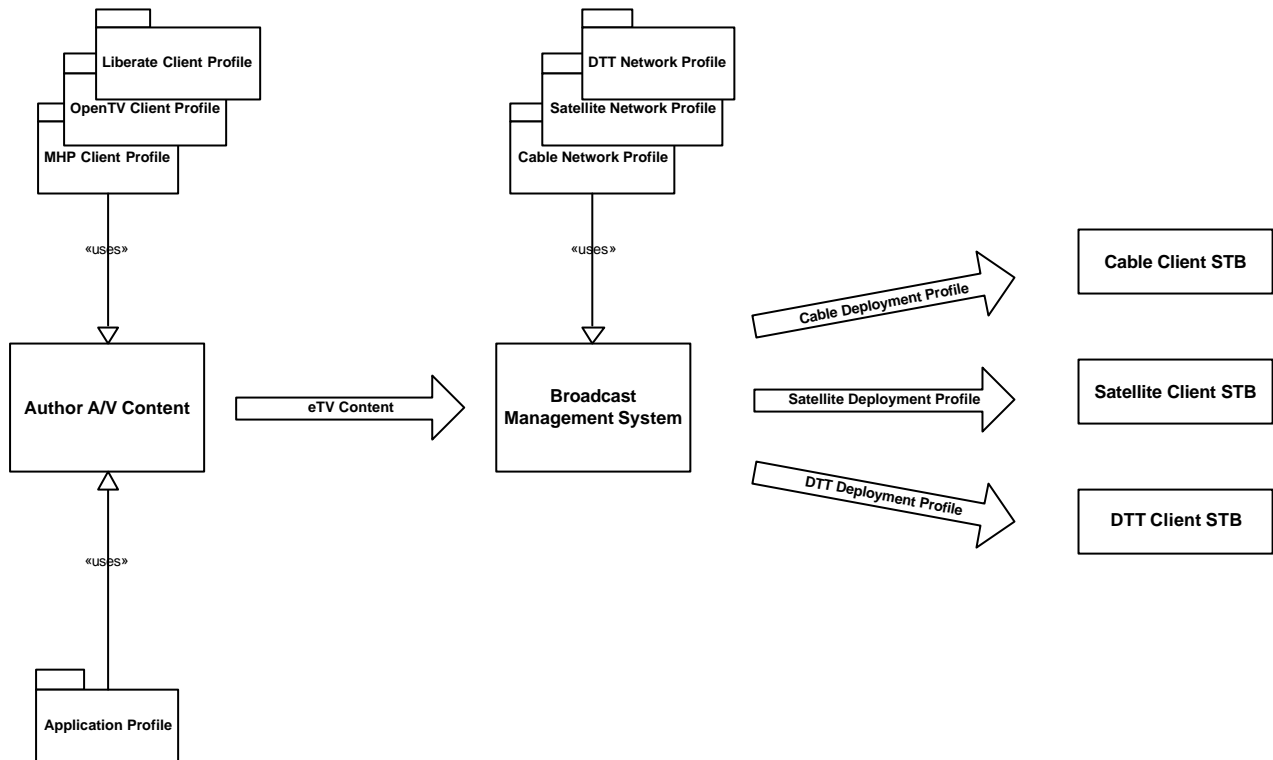
EDiCT specifically addresses 3 areas to improve European access to interactive services and applications:

- **Platform Abstraction** - EDiCT provides a *unified production and broadcast workflow* for enhancedTV by integrating existing tools around open standards and by incorporating content management technology.
- **Component Abstraction** - EDiCT provides UML based *Profiles* or templates to structure the authoring of content and control the management of deployments thus reducing complexity.

- **Data Abstraction** - EDiCT provides XML type interfaces between platform components to standardise the interaction of workflow components for proprietary component vendors.

EDiCT provides a way of abstracting the workflow from the specific deployment platform, therefore allowing applications to be authored once but easily delivered across a variety of networks and set top boxes.

The EDiCT project is a EC funded research project under IST Area III.1.1 *"Publishing digital content.*

The Consortium		
Partner	**Role**	
Liberate Technologies	Coordinating partner. Lead technology partner for applications development. Client middleware provider and head end server control suite.	Netherlands
UPC	Multinational cable operator, acts as end user of workflow. Also provides content management system (Mistral)	Netherlands
ST Microelectronics	Customise and prototype enhanced STB hardware and provide these to the content developer partners.	France
SciP AG	Provides head end technical solutions, and broadcast playout servers.	Germany
Consorzio Pisa Ricerche	Deals with eTV applications development and leads the testing and assessment phase.	Italy
XIM	New media developer, focusing on application development	UK
Nexture	Provides business planning and management consultancy.	Italy
Nagravision	Provider of integration technology and Conditional Access for set top boxes	Switzerland