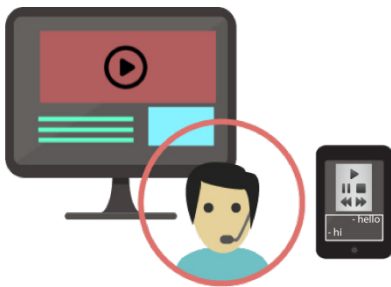


## Create a service **once** | run it **anywhere**

- Simultaneous multi-screen media services providing a unique user experience
- Ubiquity and service portability
- Social media experience sharing
- Adaptive content
- Context aware



**MESH** enables seamlessly adapted multi-screen media services through a modular toolkit. **MESH** provides solutions for the following scenarios:

- **Multiscreen scenarios** where the users interact with the service using more than one device at the same time
- **Portability of services** from one device to another in **mobility** or **ubiquitous** environments.
- **Shared multimedia** experiences **between users** located in **different places**

## Use Case

A user is watching a live sport event on TV. Together with the TV signal, the connected TV provides the user a related service, enhancing the user's experience. Moreover, the TV seamlessly discovers that the user has a tablet with him and automatically associates both devices. From that moment on, the user interacts with the service in a multi-screen way:

✓ **Multi-view vision:** The user personalises the view he wants to watch, selecting multiple cameras in the TV and a different one in the tablet. E.g. he follows his favourite player in the tablet (a dedicated camera) while he watches the broadcasted signal in the TV

✓ **Access to real time statistics:** The user displays in his tablet personalised real-time statistics and overlaps part of that information in the TV to show it to the other households

✓ **Interaction with social networks:** The user selects a Twitter hashtag and displays in the TV the latest tweets on that topic while creates a chat room with his friends



## Applications

- 1.- Advanced media interactivity with live content
- 2.- Enhancement of on demand media experiences
- 3.- Simultaneous multi-screen experiences
- 4.- Pervasive services (migration, ubiquity)
- 5.- Entertainment on the Digital Multimedia Home

Cloud and local combined HTML-based services supported for the following devices

Connected TVs	HbbTV 1.1	HbbTV 1.5	HbbTV 2.0 (European future specification)	TDT Híbrida (Spanish specification)	Smart TV Alliance
Smartphones	Android	iOS	Blackberry	Windows Phone	Symbian OS
Tablets	Android	iOS	Windows Phone		
Computers	Windows	Linux	MAC OS		

The outcome of MESH has two different approaches: browser based HTML applications or native applications created from HTML technologies.

## Modules

### Multi-connection Module

This module concentrates the users' authentication functionalities among different device platforms, distinguishing between personal devices (e.g. Smartphones) and shared devices (e.g. TV). Synchronous and asynchronous resource discovery capability is also included in order to dynamically generate permanent or temporal users, devices or services associations.

### Synchronisation Module

This module concentrates a group of services' contextual synchronisation tools which enable their migration along the different devices maintaining coherence, as well as media synchronisation itself in multi-user or multi-screen scenarios.

### Adaptation Module

This module is focused in the tools for the seamless adaptation of the services depending the user context. This toolkit enables the creation and execution of services along different devices at the same time, as well as the automatic interface adaptation to the features of the device.

