

# MediaSphere

## Managed SSU over-air downloads for DVB networks with MediaSphere

### Delivering interactive television

In the increasingly competitive digital age of television, broadcasters have to deliver services and value-add applications to enable them to realize higher revenues from advertising and other applications, such as gaming, while also enhancing the viewer experience.

When delivering these services over terrestrial DVB networks, broadcasters are required to support a diverse range of consumer receiving devices. Managing the software revisions on such devices can be a challenge, both operationally and on bandwidth, even with the benefit of open standards.

The suite of DVB standards includes a specification for 'System Software Updates' (SSU) that enables updating of DTT receivers over the air, in a simple and efficient manner that does not place any burden upon viewers.

### MediaSphere, a flexible interactive playout platform

Backed by three decades of broadcast experience, MediaSphere is a highly flexible and scalable platform for interactive television playout and test, that enables the delivery of innovative, rich 360° viewer experiences.

To simplify distribution of SSU data, the MediaSphere TX interactive television playout platform from Softel is deployed, configured with the proven MediaSphere Over-Air Download. This solution implements industry standardised methods for delivery of set-top box updates, making the process much more efficient and reliable.

Additionally MediaSphere can support revenue generating services, such as Push-VOD, with distribution of CI+ CAM updates and host revocations.

### Benefits

- Operational efficiency with scheduled delivery of DVB-SSU data
- Optimized bandwidth & network utilization
- Flexible cross-platform delivery
- Centralized web enabled download management
- Low cost, closed loop, lab option for CE manufacturers

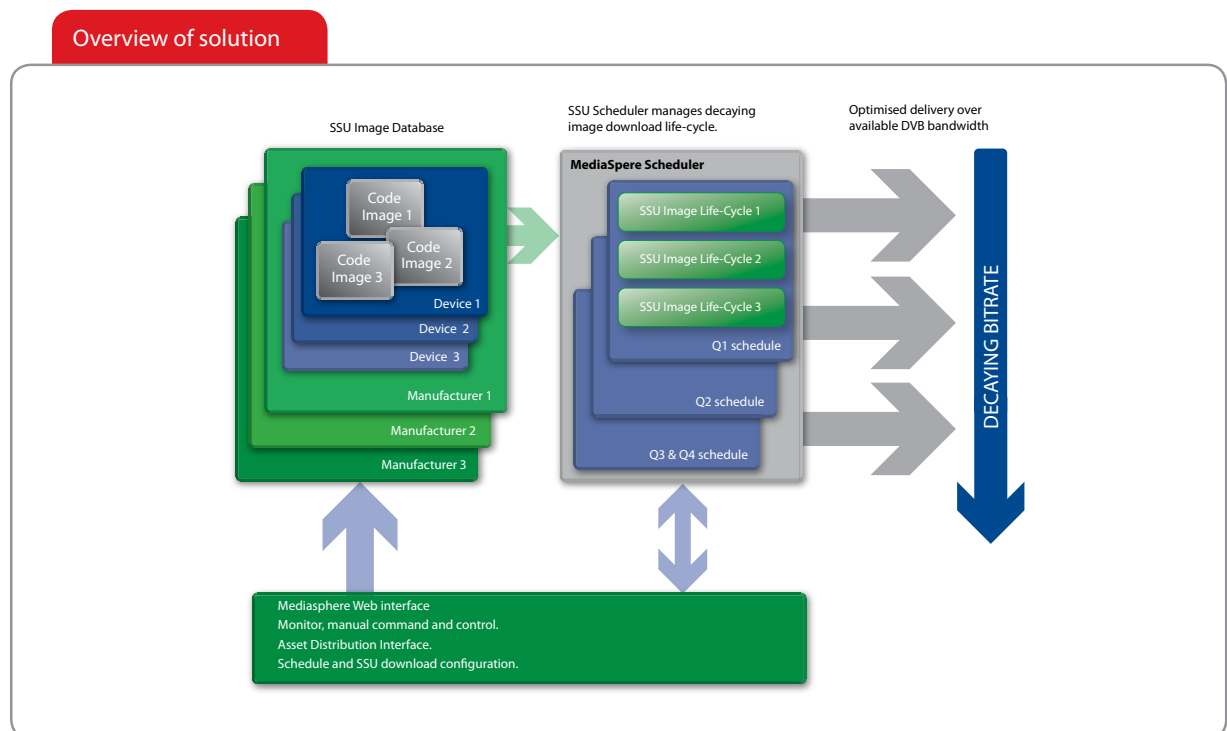


## Efficient download life-cycle management

MediaSphere Over-Air Download enables bandwidth to be efficiently managed by preparing daily, weekly and monthly Over-Air Download schedules. These define scheduled download slots with flexible parameters, that allow specific models of devices to be targeted with Over-Air Download versions in the most efficient manner, using Update Notification Table (UNT).

Operational workflow is simplified by allowing operation through the linking of code image files to a download slot in the schedule.

The concept of a download life cycle or decaying download allows Over-Air Downloads to be prioritized. This works by allowing newly released high-demand downloads to start with a larger proportion of available bandwidth, which is then gradually decreased over a time span. As the download life-cycle moves from high to low demand over time and as more devices acquire the new image, the download uses less bandwidth.



## Centralized, web enabled management

MediaSphere Over-Air Download is operated via a web application that provides monitoring, command and control of scheduled or manual Over-Air Download sessions.

The solution includes a MediaSphere Java and C# SDK for rapid integration into any workflow. The SDKs allow every aspect of Over-Air Download to be programmatically controlled for precise management.

MediaSphere offers a high performance data carousel generator, with support for simple and enhanced profile streams, with the ability to generate test streams for lab environments to allow lower cost and more efficient testing.