

## Non-linear delivery and the cloud

### Background — The evolving content consumption landscape



A recent report from Digital TV Research ([www.digitaltvresearch.com](http://www.digitaltvresearch.com)) forecasts that overall online TV and video revenues, in Europe alone, over fixed broadband networks will reach \$12.8 billion in 2020, up from the \$4.8 billion expected by the end of 2014. This proliferation in the consumption of media content is driving a compelling need for traditional broadcast organisations, as well as new entrants to implement highly efficient file-based content and workflow management

systems to satisfy the insatiable consumer demand for more content on an ever increasing number of media delivery channels to a diverse number of screen formats and devices.

### Mediaflex™ — The solution to on-demand content preparation

Mediaflex™ provides the most efficient business platform available today for the acquisition, management and delivery of content to the plethora of OTT, VOD and non-linear delivery networks. It encompasses a comprehensive digital asset management system tightly integrated with a business process management engine and an Service Orientated Architecture (SOA) environment that provides scalability across the content lifecycle.

### Package Management

Mediaflex package management enables fast and efficient configuration and management of all package requirements for each individual delivery platform or partner. The configuration includes metadata schema, video, audio, subtitles, closed captions and images.

Metadata schema management in Mediaflex enables users to create new XML schema for new services and platforms and to modify existing ones where required. XSLT documents are used to transform the metadata held within Mediaflex into the schema required such as CableLabs, iTunes, Amazon and Netflix. Creation of the XSLT documents is provided to Mediaflex users negating the need for external development resources, reducing costs and speeding up time to market.

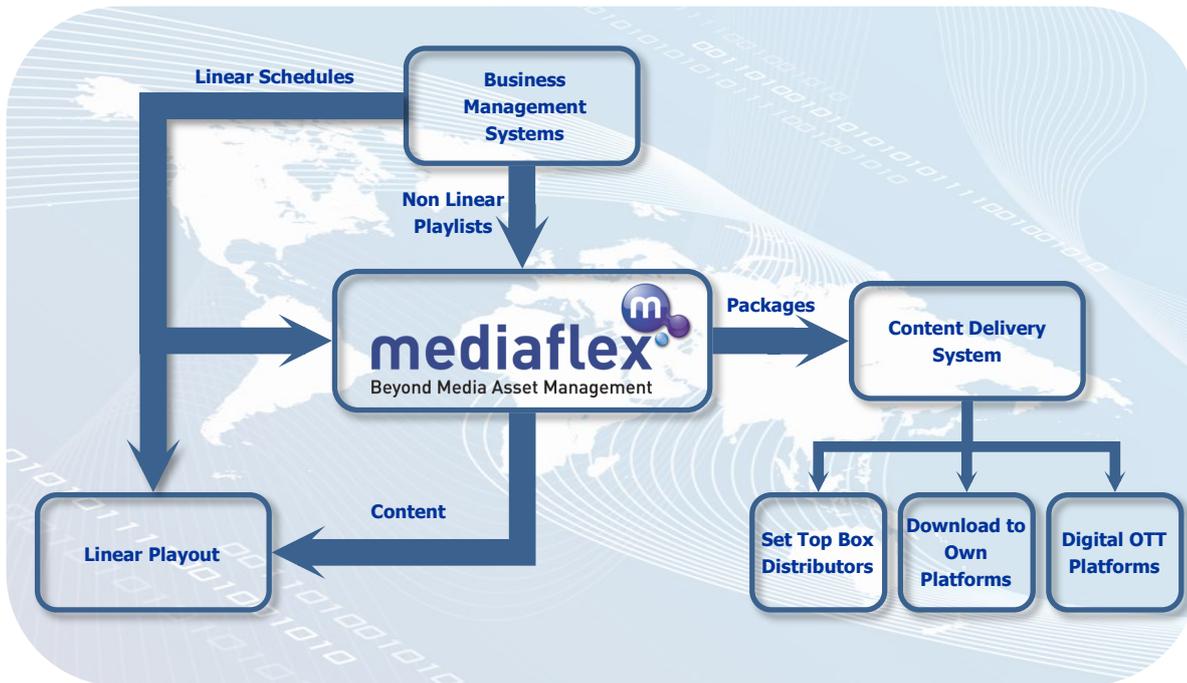
Mediaflex provides comprehensive support for still image asset management. Multiple images can be associated with each package to fulfil the requirements of each service delivery platform.

Mediaflex provides the management of all of the video, audio, subtitle and closed caption

Mediaflex Workflow templates are set up to use the package configuration settings to orchestrate the processes required and create the relevant package for each delivery endpoint. Multiple formats of each programme or event are created automatically using the integration with transcode devices such as Elemental, Telestream and Harmonic.

```
<?xml-stylesheet href="xslt.xsl" type="xslt" />
<root>
  <mediaflex>
    <asset id="1" type="video" />
    <asset id="2" type="audio" />
    <asset id="3" type="image" />
    <asset id="4" type="caption" />
    <asset id="5" type="subtitles" />
    <asset id="6" type="closedcaption" />
    <asset id="7" type="image" />
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    <asset id="50" type="image" />
  </mediaflex>
</root>
```

## Mediaflex — Integration to create efficient content preparation for non-linear delivery



The file-based environment for linear playout has evolved so that as content is ingested or modified (such as adding languages) in Mediaflex all of the relevant metadata is passed back into the business systems in order to know what was available and what could be scheduled.

In the non-linear environment however, broadcast organisations and content providers have typically been dependant on excel-based planning sheets and the people who put them together, so as the content demand has increased so has the associated incremental labour costs. In addition, this paper-based environment causes a lack of linkage between activity in a non-linear and linear environments. As updates are made to the linear schedule the non-linear schedule doesn't work in conjunction with it, reducing efficiency and ultimately revenue streams.

To overcome these constraints, media organisations such as Discovery Communications are placing Mediaflex at the heart of the content preparation and delivery to non-linear and linear platforms. The diagram at the top of the page provides a high level view of the integration.

### Mediaflex — Integration to Cloud based systems

As part of the evolving content landscape the use of cloud based services and storage is becoming increasingly prevalent. Mediaflex provides integrations to these services through the Service Adapters within the Mediaflex Resources SOA platform. Current integrations include

- Amazon S3
- Amazon SQS
- Microsoft Azure
- Dropbox
- Akamai
- Encoding.com

**TMD** specialises in the development and delivery of solutions and services to the global media, broadcast and archive industries using the Mediaflex family of products. Mediaflex enables media organisations to manage both the physical media and digital file-based content with their associated workflows. Organisations utilising Mediaflex for the smooth and efficient running of their facilities include organisations such as: Arqiva, Discovery, US Senate, Sky Italia, Deluxe and Turner Broadcasting.

Detailed specifications of the Mediaflex® product suite can be obtained from TMD. TransMedia Dynamics Ltd has a policy of continual enhancements. We reserve the right to change the specification without notice. Mediaflex® is a registered trademark of TransMedia Dynamics Ltd. © 2014 TransMedia Dynamics Ltd.

**Head Office**  
TransMedia Dynamics Ltd.  
Tower House, High Street  
Aylesbury, BUCKS HP20 1SQ  
UK  
Tel: +44 (0)1296 745080  
Fax: +44 (0)1296 745055  
Email: [info@tmd.tv](mailto:info@tmd.tv)  
Web: [www.tmd.tv](http://www.tmd.tv)

**North America**  
TransMedia Dynamics Inc.  
7719 Wood Hollow Drive  
Suite 240  
Austin, Texas 78731  
USA  
Tel: +1 (512) 600 3133  
Email: [info@tmd.tv](mailto:info@tmd.tv)  
Web: [www.tmd.tv](http://www.tmd.tv)

**Australia**  
TransMedia Dynamics Ltd.  
P.O. Box 3872  
Weston Creek  
ACT 2611  
Australia  
Tel: +61 (0) 451 997 434  
Email: [info@tmd.tv](mailto:info@tmd.tv)  
Web: [www.tmd.tv](http://www.tmd.tv)