

The Space – technology briefing note

The technology platform

The Space is built around a set of connected technologies that will work together to make commissioned works available across PC, mobile, tablet, connected TV and linear television.

The core platform will comprise:

- a content management system (CMS) - to manage data and media and create / schedule the user-facing pages
- media stores - to hold the digital media files such as video and audio)
- transcode services - to create different versions video / audio files for the different user devices
- audience facing servers - to publish the pages to the user devices)
- a content delivery network (to manage distribution of video to user devices during high demand

This will be fed by an intake operation which will:

- receive media from content creators and relay it to transcode services
- receive data and metadata from content creators and enter it in to the CMS

The platform will transcode the media into a variety of formats for playback on different devices and store it ready for publication. It will also store all of the related information, publishing it alongside the media on HTML webpages.

There will be separate publication templates for each platform's optimal screen-size; one each for smartphone, tablet, computer browser and connected TV, as well as tools to support delivery to linear TV.

The CMS will use the information provided by the device or browser to determine the appropriate version of the transcoded media file, and the template that should display for best results. These pages will 'go live' according to a schedule defined by the editorial team.

Delivery

We envisage that audio, video, text and images will be provided by arts organisations to a central intake point.

Large media files (eg long-form video), should be delivered to the intake point using portable hard drives.

Smaller media files, images and text may be entered or uploaded by the arts organisations themselves, using a web-based tool in some cases. They may also be entered into the system by the intake team, based upon information provided to them by the arts organisation. they

Once the webpages have been readied, the intake team will contact the arts organisation and the editorial team to view the pages in advance of publication. There will also be an opportunity to test view audio-visual material at this point.

Navigation and grouping

The metadata that will be provided by arts organisations will enable the CMS to automatically filter content which is similar or related for example by genre, venue, city of origin, writer, performer, media-type, or 'recommended by person x'.

What is metadata?

Find out more at this [online tutorial](#).

Minimum requirements for metadata/catalogue

The catalogue is vital component of The Space as it allows works to be linked together and makes it possible for users to navigate between the wide range of material being commissioned. Each project will be asked to provide sufficient metadata to support this process. At the moment the schema includes the following fields, but this is likely to change.

Information	Example
title of item	Macbeth On Ice A live broadcast of Skating
subtitle	Shakespeare from the Streatham Ice Rink
description of material	explanatory blurb that describes the material in detail
contributor list (name, role)	roles: producer, director, writer, performer, interviewer, generic "contributor", other
commissioner	(ie Art Council England, Creative Scotland)
genre	Dance
genre other info	Short description of sub genre (eg Ballet, Modern dance)
nation of production	England
location of production	Streatham Ice Rink, London
date of production	1 st June 2012
A unique reference number identify the media to the providing organisation	556884-
duration	2 hours
primary media	video

other media 1	images
other media 2	audio
other media 3	n/a
related material	selected other productions of Macbeth, The Making Of Shakespeare On Ice
primary contact name	Jenny James
primary contact phone number / email	0200 000 0000, jennyjones@qwertymail.com

File formats

A range of file formats will be accepted at the ingest point. This is the current list (as of November 2011)

Video	
Container	MOV or MP4
Codec	H.264 2 pass
HD Resolution	1920x1080, 1280x720
HD Bit Rate	Minimum 5Mb/s Maximum 100Mb/s
SD Resolution	960x544, 640x360
SD Bit Rate	Minimum 2Mb/s Maximum 50Mb/s
Aspect Ratio	16:9
Frame rate	24, 25, or 30 FPS
Deinterlaced	If possible
Audio	
Codec	AAC-LC
Bit Rate	320Kb/s

