

BluFocus presents:
3D-FOCUS: Part I - Blu-ray
An Introduction to 3D
by Industry Experts

FOCUS

An ONLINE WEBINAR
March 4th, 2010
11:00am PST
www.blufocus.com



Welcome



- Introduction of **3D-Focus Webinar: Part 1 – Blu-ray**
- Submit questions via chat or email 3D-FocusWebinar@blufocus.com
They will be collected for the Q&A section at the end of all presentations.
- Please note that not all questions might be asked depending on number received.

ENJOY!! Let's begin!

Start time: 11:00 pst



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3D Overview

- THX – Rick Dean



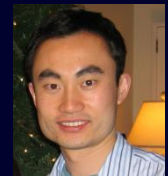
Video Encoding

- Sensio – Etienne Fortin
- TDVision - Manuel R. Gutierrez Novelo



3D Authoring

- Sonic – Chris Neely
- Netblender – Denny Breitenfeld
- Sony – John Ying & Rob Aubey



Content Creation

- Trailer Park – Curt Doty



Software/Hardware

- NVIDIA – Alex Soohoo



Accessories

- RealD – Matt Cowan
- XpanD – Ami Dror

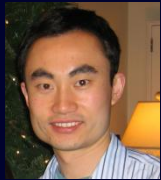


3D Testing

- BluFocus/3D-Focus – Juan Reyes



3D Authoring



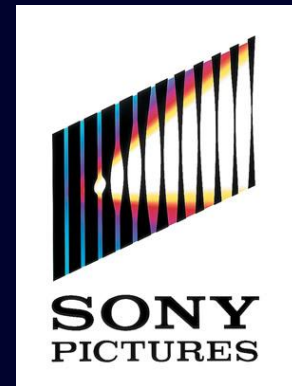
Mr. John Ying
Engineering Architect

John Ying is currently working on tools implementation for Blu-ray Disc authoring at Sony Pictures Entertainment. He came from an IT consulting background specializing in digital media space. He began working with Blu-ray technology since 2004.



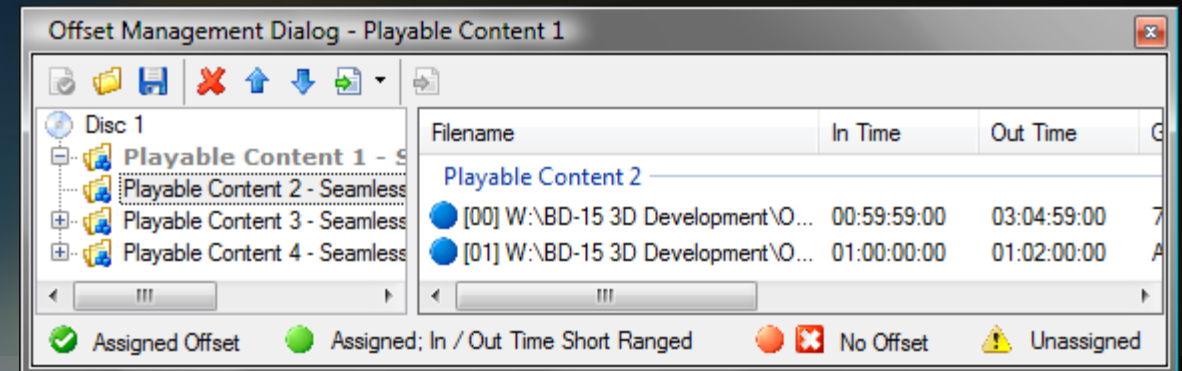
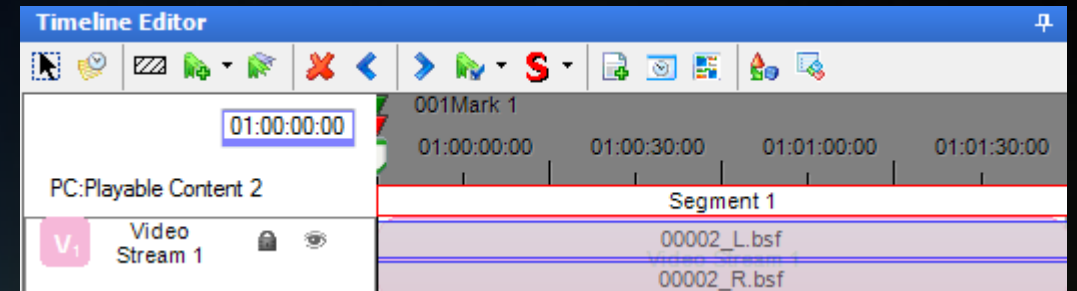
Mr. Rob Aubey
Manager of Software Engineering

Rob Aubey is Manager of Software Engineering, for Blu-ray Technologies, at Sony Creative Software, where he works closely with Sony Pictures Entertainment and Sony Electronics to ensure Sony's Blu-ray Disc authoring software and BD encoders benefit from constant communication between the film and consumer electronics industries as the technology evolves. Rob has more than 20 years of experience in the television industry, and has also held production positions creating and managing content for traditional television and electronic media.



3D Blu-ray Disc Authoring with Blu-print™

- Video Elementary Streams
 - MVC Base View and Dependant View – 2 files each clip
 - Offset Metadata Streams to be embedded in Dependant View Clip
 - Blu-print will automatically determine and set video type
- Graphics Offset Metadata
 - Need to be prepared in advance
 - Sony Vegas Plug-in in development
 - Stream automatically incorporated by Blu-print at MUX time
 - Used by players to display Subtitles and Menus



3D Blu-ray Disc Authoring with Blu-print™

- Features
 - Seamless Connection
 - Seamless Layer-break
 - Subtitle
 - Normal, Top Aligned, Bottom Aligned PG
 - One Plane + Offset
 - IG Menu
 - One Plane + Offset
 - In-MUX and Out-of-MUX Always On + Pop Up
 - Support for BD-J 3D
 - Automatic file layout
 - UDF and Cutting Master generation

3D Blu-ray Disc Authoring with Blu-print™

- Consideration
 - Disc Size Allocation
 - Offset Data Capture
 - QC Test Complexity
- Availability
 - Demonstration at NAB
 - Beta Coming soon
 - Inquire at <http://www.sonycreativesoftware.com/bluprint>

3D Subtitle Offset Editing for BD Authoring

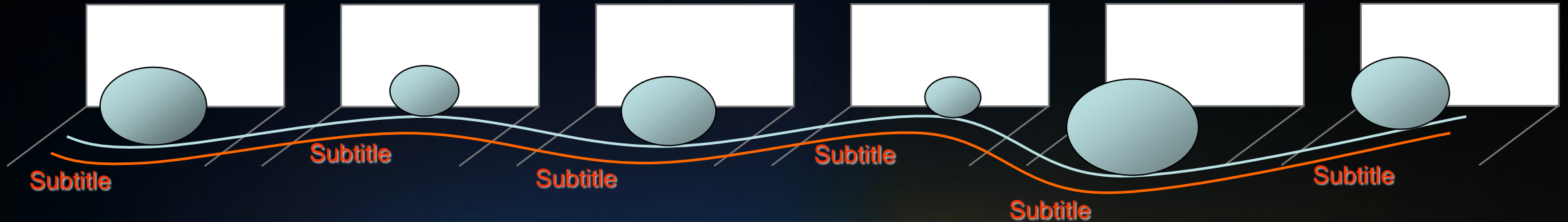
The purpose of designing a 3D subtitle editing tool is to provide subtitle vendors and authoring facilities a user friendly method for creating the offset sequence data (offset metadata) to be integrated into the BD authoring process. The users will use this tool to preview the subtitle graphics being played back in 3D mode, and fine tune the location of the subtitle images.

To produce BD spec compliant offset sequence data with-in a reasonable timeline and cost structure for Blu-ray Authoring, a new workflow application for Offset Sequence generation needed to be designed.

3D Subtitle Offset Editing for BD Authoring

For 3D video, you must keep the subtitle depth justified with the video depth (distance projected from screen depth), or the subtitles can be hard to read.

- It is hard to focus on multiple depths at the same time.



- During scenes with fast action, the video depth may change during the display of a single subtitle event.
- If the subtitle depth changes suddenly, it can cause viewing discomfort.
- Subtitle disparity is the adjustment on the Z axis of the event from screen depth or 0 disparity.

3D Subtitle Offset Editing for BD Authoring

- Create the offset sequence meta data to be integrated into the BD authoring process.
- Provide a friendly manual way to view strategic scenes and position subtitle events appropriately.
- Ability to preview the subtitle graphics being played back in 3D mode, and fine tune the location of the subtitle images.
- Able to manually move and record the subtitle events offset disparity points on a frame by frame basis.

3D Subtitle Offset Editing for BD Authoring

Platform for accurate 3D subtitle offset generation

Product still in development

Projected release is June 1, 2010

Demos will be available at the Sony Creative Software
NAB 2010 booth LVCC Hall C 5, C10515

Vegas Pro 9 NLE benefits for 3D subtitle editing



- Mature video editing platform
- Strong input file format support
- Supports S by S video playback and interlaced output
- Supports multiple tracks for subtitle arrangements
- Proven playback engine, video scaling, and compositing power