Open Exhibits SDK Release Notes

Version 2.6.1

Release Date: 6 May 2013

New Features

Integrated CML audio layer assigns sounds to object interactions using the sound tag

Changelog

- CHANGED: Base component class now automatically calls new reset method in ScrollPanes on info flip
- ADDED: ScrollPane and ScrollBar both have reset methods to reset content positioning and scroll thumb locations
- CHANGED: Added event listener so the video play button could be operated independent of a viewer
- CHANGED: Slideshow now recursively searches all children when changing slides and runs any stop() methods it finds
- FIXED: Error in the Orb menu where its background would be added as a child of itself
- CHANGED: Dial arrows are larger
- CHANGED: ScrollBars now respond to taps on the rail to move the thumb up or down by 1/10th of the total rail height or to the tap location, whichever is smaller
- CHANGED: ScrollBars have new property "thumbMin" to set the minimum size of the scroll thumb, which otherwise defaults to 20px
- CHANGED: MP3's no longer handle their own loading, instead load through MP3Factory
- ADDED: Sound class, plays a sound (mp3 only) on touch event determined by user in parent object. ID targeting currently does not work, placeholder for future functionality
- ADDED: SoundManager. Keeps track of sound files and parent objects loaded at CML parse time
- ADDED: SoundUtils, parses sound CML and will in the future provide sound modulation methods
- ADDED: MP3Factory and preloading method to CMLParser. MP3's load by default now
- FIXED: Numerous minor syntax or CML bugs in examples
- FIXED: Typo in ElementFactory property descriptions
- FIXED: Ordering of events in Media class to run off of init() rather than open.
- FIXED: Out of range exception in DropDownMenu
- FIXED: SlideShow autoplay inconsistency
- FIXED: Inconsistent initialization pattern of LiveVideo class
- FIXED: CollectionViewer tweening engine method misfire that would cause a crash
- FIXED: RootDirectory bug in parser not updating paths for Include statements
- FIXED: FanLayout invalid origin offset
- FIXED: PileLayout invalid origin offset
- FIXED: Broken gesture activation caused by unpredictable GML initialization
- FIXED: AlbumViewer broken previous and next operations
- FIXED: Stroke gestures
- FIXED: Hold gesture interval settings

Known Issues

• TLF loaded through CML does not support css styles

- Rotating an object with boundary_filters in GML set for the current gesture seems to rotate the boundaries allowing for an object with boundaries to be dragged offscreen
- boundary_filters on "n-drag" and "n-manipulate" only affect the upper-left hand corner of the object
- GML cluster point number settings for TAP gesture cause tap events to fire continuously on touch
- Enabling capture flag parameter on event registration breaks GWGestureEvents
- Can't assign gestureList to CML objects in AS3
- Embedded CML application swfs don't work with CML parsing
- searchChildren method fails on deeply nested CML Objects

Release Date: 16 April 2013

New Features

- 2D LEAP integration
- Starling support
- TweenMax integration
- Database-driven rendering
- New and improved CML expression attributes, selectors, and template renderers
- Open GML binding infrastructure allows use of any framework or input type
- New and improved UI elements and components including:
 - Accordion
 - Model3D
 - Drawer
 - Dock
 - FlickrQuery
 - Hotspot
 - ProgressBar
 - o SlideshowViewer
 - ScrollPane
 - o ScrollBar

- ADDED: Slideshow can now run in reverse as well as forward
- FIXED: ScrollPane's width and height can now be properly set
- FIXED: ScrollPane now accepts any display object for scrolling
- FIXED: Width, height, and other properties can now be properly set in Dial
- ADDED: RadioButtons can now be used for pagination in components
- ADDED: RadioButtons can now accept displayObjects for up and down states
- ADDED: Gigapixel now has a visibilityRatio property that can be set to determine how much the gigapixel image fills the screen
- ADDED: Gigapixel now has a zoom property to set starting zoom
- ADDED: Gigapixel now has a panTo method that allows users to programmatically pan the gigapixel image
- ADDED: Gigapixel now has read-only properties to retrieve viewport location
- ADDED: Button can now use "tap" as an event.
- CHANGED: BetweenAS3 replaced with TweenMax
- CHANGED: Input degradation from touch to mouse is now off by default (use auto)
- CHANGED: Runtime key no longer required
- ADDED: auto property to GestureWorkCore class
- CHANGED: Gesture input types can now be turned on simultaneously
- CHANGED: GWTouchEvents auto-selects between mouse/tuio/native touch input types

- CHANGED: TouchSprite / TouchMovieClip overrides addEventListener for GWTouchEvent
- ADDED: Leap 2D support
- ADDED: leap2D property to GestureWorksCore class
- ADDED: VirtualTouchObject class
- ADDED: Starling input flag to assist in configuring touch for the Starling Framework
- ADDED: SlideshowViewer component class
- CHANGED: GraphicFactory now extends TouchContainer
- CHANGED: VideoFactory now extends TouchContainer
- ADDED: Components now allow multiple back and fronts
- ADDED: Text size toggle feature for all Components
- ADDED: Components can now link multiple backs and fronts to index
- ADDED: toBitmap() method in DisplayUtils class
- ADDED: getAllChildrenByType() and getAllChildren() methods in DisplayUtils class
- ADDED: Text to bitmap methods for Text class
- ADDED: ProgressBar element
- ADDED: Media components now accept progress bar
- ADDED: Forward and next button support for AlbumViewer
- ADDED: MenuAlbum for tap and drag-and-drop selection
- ADDED: Album accessor to item at current snap point
- ADDED: Added background to Album belt
- ADDED: CML object state support
- ADDED: Load, save, tween CML object states
- ADDED: Improved RenderKit support for CMLParser
- ADDED: dataRootTag attribute to Renderer tag
- FIXED: Include tag now works in RenderKit
- FIXED: RenderKit expression attributes now work inside of RenderKit
- CHANGED: RendererData and RenderKit tags now optional when using external dataPath
- ADDED: Drawer element class
- ADDED: Model3D element class
- ADDED: Accordion element class
- ADDED: Hotspot element class
- ADDED: Dock element class
- ADDED: FlickrQuery element class
- CHANGED: Flickr now loads images through the BitmapFactory.
- ADDED: Pre-preprocess stage for CMLParser
- ADDED: Improved expression attributes in CML
- ADDED: Database queries for CollectionViewer
- ADDED: Flickr Database support for CollectionViewer
- ADDED: Collective Access Database support for CollectionViewer
- ADDED: Filter support for CML
- ADDED: Bevel filter class
- ADDED: Blur filter class
- ADDED: DropShadow filter class
- ADDED: Glow filter class
- ADDED: Alpha transitions to all layouts
- ADDED: Tween algorithms (exponential, quadratic, etc.) to all layouts
- ADDED: Layouts can center items in rows and columns
- ADDED: Layout continuousTransform flag to either reset or increment transformation properties (on

by default).

- ADDED: Layout exclusion list to omit specific objects of the container from the layout application
- ADDED: Layout scale and rotate attributes to apply to all involved children
- ADDED: Layout cacheTransform flag to either reuse or recreate child transforms for each reapplication
- ADDED: Layout easing attribute to specify easing equations
- ADDED: document class for DOM accessor methods to CML objects
- ADDED: as3Query library for jQuery style CML selectors
- ADDED: AttractKit class
- ADDED: Improved functionality in StageKit
- ADDED: Public access to embedded TUIO library
- ADDED: CML Object cloning in AS3
- FIXED: Zombie point from clusterBubbling causing errors in gesture transformations
- ADDED: dropShadow property on ElementFactory
- FIXED: OpenZoom now uses an affine scale
- CHANGED: ChildList extrapolated and now extends LinkedMap
- ADDED: Native iterators and array notation support for LinkedMap
- ADDED: Native iterators and array notation support for List
- CHANGED: Arrays of List class are now type Vector
- ADDED: ColorUtils class
- CHANGED: Removed ComponentKit class
- CHANGED: propertyStates method of CML objects deprecated to state
- CHANGED: Removed LibraryKit class, now handled internally by CML parser
- ADDED: LoaderFactory class

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- GML cluster point number settings for TAP gesture cause tap events to fire continuously on touch
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Release Date: 2 February 2013

- FIXED: CML include tag incorrectly ordering the diplay list under certain nesting conditions
- FIXED: CML RenderKit not found by Parser when RenderKit is child of CML root
- CHANGED: Gestureworks license agreement

Release Date: 30 January 2013

- FIXED: Taps not working in the Simulator
- FIXED: ClusterBubbling error when touchsprite contains non-touchsprite child
- FIXED: CML include tag incorrectly ordering the display list
- ADDED: AlbumViewer linking to link back and front Album objects providing individual info panels for each item
- ADDED: Album loop mode to allow continuous scrolling of items
- ADDED: Album dimension settings to display more then one item at a time
- ADDED: Exposed settings to enable interaction of Album items
- CHANGED: Improved ScrollPane and ScrollBar UI elements
- ADDED: GML examples

Release Date: 31 December 2012

Changelog

FIXED: MX package import errors on CML.swc

Release Date: 18 October 2012

- ADDED: Text (TextElement) now supports HTML text through CML
- ADDED: Button (ButtonElement) can now toggle nested buttons
- CHANGED: Button (ButtonElement) init attribute changes to initial
- BUG FIX: collection viewer failed hit tests
- ADDED: album UI Element
- ADDED: key UI Element
- ADDED: tab UI Element
- ADDED: tabbed container
- ADDED: touch keyboard
- ADDED: album viewer component
- ADDED: fan, pile, point, and random layouts
- ADDED: CloneUtils class
- CHANGED: layouts support tween-to-position
- CHANGED: containers can store a list of local (child) layouts to apply but can still apply global (external) layouts
- CHANGED: display objects can be assigned directly to button element states
- ADDED: Toggle class
- ADDED: Switch UI Element
- ADDED: Dial UI Element
- ADDED: input attribute to TextFactory
- ADDED: livevideo element
- ADDED: ScrollBar class
- ADDED: Stepper class
- ADDED: draw commands to graphics class
- ADDED: microphone class
- ADDED: camera class
- ADDED: livevideo viewer
- ADDED: Scrollpane
- ADDED: OrbMenu
- ADDED: Net status events and dispatch events to video class
- ADDED: DropDownMenu UI element
- ADDED: Flickr UI element
- ADDED: FlickrViewer
- ADDED: Magnifier UI element
- ADDED: MaskContainer UI element
- CHANGED: MaskImageViewer
- ADDED: ModestMap UI element
- ADDED: ModestMapMarker UI element
- ADDED: ModestMapViewer
- ADDED: Slideshow UI element
- ADDED: WAV UI element
- ADDED: WavPlayer
- ADDED: WaveForm utils

- ADDED: YouTube UI element
- ADDED: YouTubeViewer
- ADDED: ExampleTemplate GML utils
- CHANGED: Gigapixel UI element
- CHANGED: GigapixelViewer
- CHANGED: MP3 UI element
- CHANGED: MP3Player
- CHANGED: Panoramic UI element
- CHANGED: PanoramicViewer

Release Date: 27 June 2012

- CHANGED: onStageEvent has changed from a private method to a protected method of the Component class
- ADDED: over property on ButtonElement class (currrently only works for mouse events)
- FIXED: gesture release event firing early
- FIXED: Tap gesture unreliable
- FIXED: Hold early firing
- ADDED: processing_rate attribute to GML global param
- FIXED: CollectionViewer offscreen/repopulate algorithm more precise

Release Date: 13 June 2012

- FIXED: simulator, point add and remove and display. Now works when supportstouch = true
- FIXED: debugger gesture name display, removed duplicate gesture properties
- FIXED: TouchMoviClip gesture processing
- *ADDED:* touch-move caching on all point objects, global time interval gesture analytics, decouple from rendering frame rate.
- ADDED: n-manipulate gesture, combines, n-drag,n-scale and n-rotate into a single gesture
- ADDED: clusterBubbles variable to replace clusterBubbling variable
- CHANGED: moved gesture based cluster matching out of kinematic
- ADDED: preloading to CML ImageList, ImageSequence, and ImageSlideshow classes

Release Date: 6 June 2012

- FIXED: gesture start, complete and end reset correctly
- ADDED: n-tap, n-double_tap and n-triple_tap functionality. Now only fires when n specified events occur, note: if n=0 batch events are fired
- FIXED: tap, double_tap and triple_tap now have arbitrary names in GML
- FIXED: Event time and time between events can now be set in GML for tap gestures
- ADDED: Complete n-hold gesture control
- ADDED: Integrated HOLD gesture processing into kinemetric class
- ADDED: Improved TUIO implementation for AIR including CML components and elements

Release Date: 17 May 2012

- BUG FIX: Touch simulator (except debugger)
- ButtonElement: added "down", "up", and "over" methods for auto-switching between touch and mouse depending on capabilities
- Added CML object BackgroundKit, which auto-centers nested content within the stage
- BUG FIX: Collection Viewer amountToShow property displaying wrong number

Release Date: 3 May 2012

- The first parameter of the getClass() method of childlist/LinkedMap is now of type Class rather than string representation of class
- Added getKeyArray() and getValueArray() methods to childlist/LinkedMap
- Added auto-size feature to ButtonElement class, which resizes ButtonElement to largest element size within the button
- TUIO is now supported in AIR
- Added amountToShow property to CollectionViewer
- Added animateIn property to CollectionViewer
- BUG FIX: added GestureWorksGML_Flex.swc for Flex based applications to resolve conflict with GestureWorksGML.swc and Flex
- implemented parallel clustering, clusterbubbling boolean
- implemented gesture broadcasting via targetList
- implemented gesture targeting via target
- partial implementation of custom gesture types

Release Date: 10 April 2012

- Added CML support for ImageList, ImageSequence, and ImageSlideshow element
- Added close method to ImageElement/BitmapFactory
- Component class moved to the com.gestureworks.cml.components package
- Removed LabelElement class from framework
- Removed PreloaderElement class from framework
- Removed EvalButton class from framework
- Added MaskImageViewer component
- Added PanoramicViewer component
- Added MediaViewer component