# Single Part Expandable Ad

## **URL For this Creative**

http://mraid.iab.net/compliance/units/expand.txt

# Goal of Ad

This ad will go through the life-cycle of a typical MRAID expandable ad with orientation support.

## **This Creative Tests:**

#### **MRAID Methods Tested:**

- mraid.addEventListener()
- mraid.close()
- mraid.expand()
- mraid.getCurrentPosition()
- mraid.getExpandProperties()
- mraid.getScreenSize()
- mraid.getState()
- mraid.isViewable()
- mraid.removeEventListener()
- mraid.setOrientationProperties()

### **MRAID Events Watched:**

- error
- ready
- sizeChange
- stateChange

### **JavaScript Events Watched:**

- window.orientationchange
- window.onload

### **Behavior of Ad**

# Initial/Default State

- Initial placement: 140x50 DIP or higher.
- Ad has a background of #000, color #f00.
- Ad adds listeners for MRAID events. A listener is removed and then added again for stateChange.
- Ad creates a button (span element) and places it inside the created div. It is centered using mraid.getCurrentPosition. (See Fig 1)
- Ad responds to rotation event in default state (hooks into sizeChange to reposition the div and button).



Fig 1 (Portrait) – Default state



Fig 1 (Landscape) – Default state

### Click "Expand!"

- Ad expands using mraid.expand().
- A div will show and absolutely position itself using the values of mraid.getCurrentPosition(). There must be 15px margins on all edges (13px with outline). The div has a white background with red text and a 2px red outline.
- A button (span element) will be added to the bottom of the white div. It will have a black background and red text. This is positioned using mraid.getCurrentPosition(). (Fig 2)
- Ad rotates freely and sizeChange event will trigger and update to reflow the ad.
- On width>height, the button will be disabled and inform the user to rotate to portrait.
- Ad places a placeholder div in the top right to indicate where the SDK close button must be. This div is white with a red X. This area is only an indicator and has no close functionality on its own.
- Expanded ad places a div to show logging messages inline with the ad. This is positioned using CSS only and doesn't use MRAID for positioning. All console.log messages from this compliance ad are displayed here.



IAB MRAID2 Expandable
Compliance Ad.
Top and bottom must be equal
margin.
Left and right must be equal
margin.

IAB MRAID2 Expandable Compliance Ad.

1398179094762: [Cur: x: 0, y: 0, width: 320, height: 533] [Window: x: 320, y: 75] [Scr: width: 320, height: 533] [expProps: width: 0, height: 0] [Current orientation: Portrait] [Last Event: Size Change]
1398179094640: [Cur: x: 0, y: 73, width: 320, height: 75] [Window: x: 320, y: 75] [Scr: width: 320, height: 533] [expProps: width: 0, height: 0] [Current orientation: Portrait] [Last Event: Size Change]
1398179094282: [Cur: x: 0, y: 0, width: 320, height: 533] [Window: x: 320, y:

# Lock to Landscape

Fig 2 (Portrait) - Initial expanded state



# IAB MRAID2 Expandable Compliance Ad. Top and bottom must be equal margin. Left and right must be equal margin.

1398179117008: [Cur: x: 0, y: 0, width: 533, height: 320] [Window: x: 320, y: 533] [Scr: width: 533, height: 320] [expProps: width: 0, height:

0] [Current orientation: Landscape] [Last Event: Size Change]
1398179116864: [Cur: x: 0, y: 0, width: 320, height: 533] [Window: x: 320, y: 533] [Scr: width: 320, height: 533] [expProps: width: 0, height:

0] [Current orientation: Landscape] [Last Event: Orientation Change]

# **Rotate To Portrait**

Fig 2 (Landscape) - Initial expanded state

# Click "Lock to Landscape"

- Ad forces orientation to landscape and locks changes.
- Ad watches mraid.sizeChange() events for this process.
- White div will position itself according to mraid.getCurrentPosition and will remain with the same properties as the previous step.
- Ad removes button and creates another button (span element) located in the same place. (See Fig 3)



Fig 3 (Portrait) – Landscape locked orientation



# IAB MRAID2 Expandable Compliance Ad. Top and bottom must be equal margin. Left and right must be equal margin.

1398179136143: [Cur: x: 0, y: 0, width: 533, height: 320] [Window: x: 320, y: 533] [Scr: width: 533, height: 320] [expProps: width: 0, height: 0] [Current orientation: Landscape] [Last Event: Size Change]

1398179135947: [Cur: x: 0, y: 0, width: 320, height: 533] [Window: x: 320, y: 533] [Scr: width: 320, height: 533] [expProps: width: 0, height: 0.] [Current orientation: Landscape] [Last Event: Orientation Change]

# Lock to Portrait

Fig 3 (Landscape) - Landscape locked orientation

# Click "Lock to Portrait"

- Ad forces orientation to portrait and leaves the lock unchanged.
- Ad watches mraid.sizeChange() event to confirm change.
- White div will position itself according to mraid.getCurrentPosition and will remain with the same properties as the previous step.
- Ad removes button and creates another button (span element) located in the same place. (See Fig 4)



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IAB MRAID2 Expandable Compliance Ad.

1398179158014: [Cur: x: 0, y: 0, width: 320, height: 533] [Window: x: 533, y: 320] [Scr: width: 320, height: 533] [expProps: width: 0, height: 0] [Current orientation: Portrait] [Last Event: Size Change]
1398179157875: [Cur: x: 0, y: 0, width: 533, height: 320] [Window: x: 533, y: 320] [Scr: width: 533, height: 320] [expProps: width: 0, height: 0] [Current orientation: Portrait] [Last Event: Orientation Change]
1398179136143: [Cur: x: 0, y: 0, width: 533, height: 320] [Window: x: 320, y:

# Release Lock

Fig 4 (Portrait) - Portrait locked orientation



Fig 4 (Landscape) – Portrait locked orientation

# Click "Release Lock"

- Ad unlocks orientation.
- Ad can freely rotate.
- White div will position itself according to mraid.getCurrentPosition and will remain with the same properties as the previous step. (See Fig 5)

Close ad by hitting the top right.



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1398179158014: [Cur: x: 0, y: 0, width: 320, height: 533] [Window: x: 533, y: 320] [Scr: width: 320, height: 533] [expProps: width: 0, height: 0] [Current orientation: Portrait] [Last Event: Size Change]
1398179157875: [Cur: x: 0, y: 0, width: 533, height: 320] [Window: x: 533, y: 320] [Scr: width: 533, height: 320] [expProps: width: 0, height: 0] [Current orientation: Portrait] [Last Event: Orientation Change]
1398179136143: [Cur: x: 0, y: 0, width: 533, height: 320] [Window: x: 320, y:

Fig 5 (Portrait) - Final expanded step



## Close ad by hitting the top right.

# IAB MRAID2 Expandable Compliance Ad. Top and bottom must be equal margin. Left and right must be equal margin.

1398179204293: [Cur: x: 0, y: 0, width: 533, height: 320] [Window: x: 320, y: 533] [Scr: width: 533, height: 320] [expProps: width: 0, height: 0] [Current orientation: Landscape] [Last Event: Size Change]

1398179204178: [Cur: x: 0, y: 0, width: 320, height: 533] [Window: x: 320, y: 533] [Scr: width: 320, height: 533] [expProps: width: 0, height: 0.] [Current orientation: Landscape] [Last Event: Orientation Change]

Fig 5 (Landscape) – Final expanded step

# **MRAID 2 Compliance Checklist**

A container/SDK running this test creative must exhibit these behaviors to prove MRAID compliance.

- ✓ Default View:
- ✓ Button is centered in webview (width and height).
- ✓ Button keeps centered on sizeChange.
- ✓ Background is black.

#### **Expanded View (Initial):**

- ✓ Ad expands to full screen.
- ✓ SDK close area is in top right.
- ✓ SDK close button is above top right red X.
- ✓ White div placed in center of webview (width and height). Equal margins are all side (15px normal with 2px outline).

- ✓ Black button is placed near bottom of white div.
- ✓ Orientation change is allowed.
- ✓ On orientation change, white div reflows to new webview size.
- ✓ Rotate to Landscape. White div reflows.
- ✓ In landscape: Button says "Rotate to Portrait".
- ✓ In landscape: Button does not respond.
- ✓ Rotate to Portrait. White div reflows.
- ✓ In Portrait: Button says "Lock to Landscape".
- ✓ In Portrait: Button moves on to next step.
- ✓ SDK close area clicked closes ad back to default state.
- ✓ Debug info: Cur (mraid.getCurrentPosition()), Scr (mraid.getScreenSize()), expProps (mraid.getExpandProperties()) All widths are equal. All heights are equal.

### **Expanded View (Landscape Locked):**

- ✓ Ad remains in full screen.
- ✓ Device orientation forced to landscape.
- ✓ Device does not honor user orientation changes.
- ✓ White div placed in center of webview (width and height). Equal margins are all side (15px normal with 2px outline).
- ✓ Black button is placed near bottom of white div.
- ✓ SDK close area clicked closes ad back to default state.
- ✓ Debug info: Cur (mraid.getCurrentPosition()), Scr (mraid.getScreenSize()), expProps (mraid.getExpandProperties()) All widths are equal. All heights are equal.

#### **Expanded View (Portrait Locked):**

✓ Ad remains in full screen.

- ✓ Device orientation forced to portrait
- ✓ Device does not honor user orientation changes.
- ✓ White div placed in center of webview (width and height). Equal margins are all side (15px normal with 2px outline).
- ✓ Black button is placed near bottom of white div.
- ✓ SDK close area clicked closes ad back to default state.
- ✓ Debug info: Cur (mraid.getCurrentPosition()), Scr (mraid.getScreenSize()), expProps (mraid.getExpandProperties()) All widths are equal. All heights are equal.

### **Expanded View (Released):**

- ✓ Ad remains in full screen.
- ✓ Device orientation responds to user orientation.
- ✓ White div placed in center of webview (width and height). Equal margins are all side (15px normal with 2px outline).
- ✓ SDK close area clicked closes ad back to default state.
- ✓ Debug info: Cur (mraid.getCurrentPosition()), Scr (mraid.getScreenSize()), expProps (mraid.getExpandProperties()) All widths are equal. All heights are equal.

# Acknowledgement

The IAB is grateful for the assistance of Aron Schatz, of ASE Publishing, who created this IAB MRAID Test ad. Please direct any questions about the creative or the associated documentation to the IAB at <a href="mobile@iab.net">mobile@iab.net</a>.