

Connected TV Applications for TiVo

Video Bridge App

Design Outline

30 November 2015

Change Log

29th May 2015

V Festival required a Quick Tiles template which is assembled from content which is pulled from a video host (like Brightcove) quickly without the need to use Photoshop (pages 23-24).

18th June 2015

Changed menu background which is now composed of 4 pieces to make the transparency and overflow fades work successfully. The transparency has been added to show the image/video in the background. (Pages 24-26)

18th June 2015

Slots have been shifted down to better show the overflow of content when on pages greater than page 1. This applies to both image and text menus. Overlay menu no longer hides on LEFT press when on root level of the menu. Left button arrow hint therefore removed. When on a child level, left arrow hints still visible and pressing LEFT always returns the user to the parent level. This applies to both image and text menus.

7th July 2015

Updated Quick Tiles to have square backgrounds instead of curved.

6th October 2015

Added metadata preview pop up (page 19)

9th October 2015

The Live Events required that we add a title crawl feature because the menu listings are very truncated and need to be read by the user (page 18)

30th November 2015

We didn't have any full screen barker content for the Music OD project so we needed to add the feature to launch the menu overlay immediately, show a slideshow in the background, and to have the red button quit the app (instead of hiding the menu overlay). See pages 14-15. We also noticed Lifetime were only putting single videos in playlist but we hadn't previously shown the behaviour in the Media Player when there is only one video (pages 30-31).

Overview

The Video Bridge App is an interactive red button service launched from full-screen video. The user presses RED and a menu appears on the left-hand side of the screen in front of what's playing. This forms a 'bridge' between content, as the user can browse related assets without 'leaving' the full-screen video.

Each release of the app expresses a content partner's brand, so the graphics, fonts, and colours are customisable.

The menu is designed to be flexible so that content partners can employ quick-to-publish text lists or more eye-catching image tiles in the menus. Menus can be multi-level, and any level can us a text list or an image grid. The image grid is 2 columns wide, but any row can have a wide tile that spans the 2 columns.

Phases of Development

This menu overlay can be over OTT streaming video, live TV channels, or a slideshow. When used with OTT video the background will behave like a barker channel showing a playlist of promos or short episodes. When over live TV the menu will give the user access to related content like programme extras and on-demand menus.

Some features will not be available until TiVo provides fully functioning APIs for HTML5 apps, so this app will have to be developed in phases.

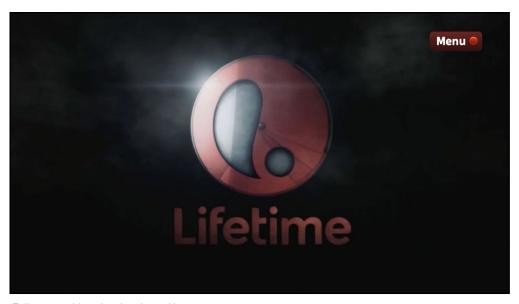
Phase 1: "Barker Bridge" version

This version will play a full screen over-the-top video stream (serving the purpose of a barker channel) with an overlaid red button prompt that launches a menu. The menu and asset metadata will likely be stored in a separate config file. The menu links other menus, full-screen slides, and/or video playlists.

Phase 2: "VOD Bridge" version

This version will add the ability to tune in to a live TV channel as a full screen background and to show the VOD menu listings related to the channel. It will also have metadata preview windows: tooltip-style pop-ups that give the user information about an asset before committing to watching it and leaving the app.

As with all current TiVo apps this app uses the standard loading screen, version messages, pop-up menus, and sounds. Refer to 'LoadingScreen_18Nov2014.pdf', 'VersionViewer.pdf', 'Popup_17Nove2014.pdf', and 'DefaultTiVoAppSounds.pdf'. See master ticket on Jira called "TiVo HTML5 shared components" at http://jcb-wb-p1:3080/jira/browse/TVAPPS-1254.



Full screen video showing the red button prompt.



The red button service turned on. The menu overlay allows for browsing without leaving the video.



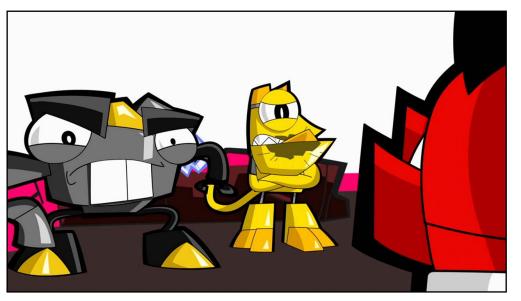
1. App launched, and video playlist starts automatically. The video or videos loop indefinately, serving as a barker channel. The red button prompt stays on the whole time. LEFT or SKIP BACK quits the app.



RED pressed, launching the menu overlay. Note red button prompt now reads 'close': a RED press now would dismiss the overlay and toggle back to the state shown on slide 1. Focus is initially on the top tile.



3. OK pressed, and video playlist is launched. Overlay UI appears immediately.



4. Overlay UI hides 3 seconds after the video starts playing. Overlay is visible again if D-PAD, COLOURS, THUMBS, or NUMBERS are pressed.



5. The next asset plays in the playlist. The upper third appears for 3 seconds at the start of the video so the user can see the video title.



6. LEFT pressed 3 times.





7. OK pressed.

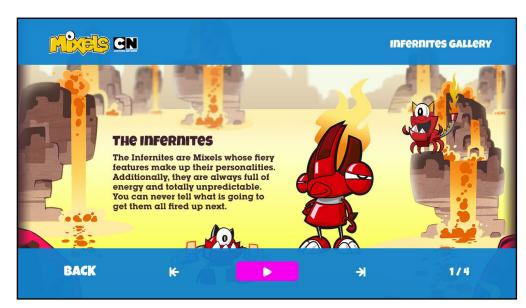
8. DOWN pressed 3 times, RIGHT pressed once. Note the tiles are scrollable.



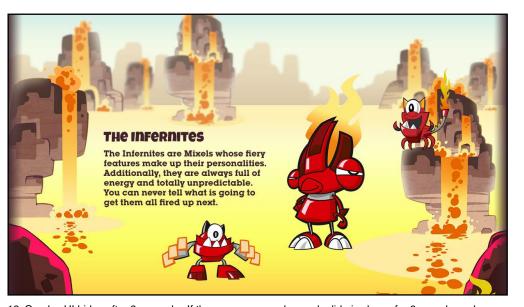
9. PAUSE pressed. The video in the background pauses, and the pause icon flashes for 1 second.



10. PLAY pressed. Video resumes playing, and play icon flashes for 1 second.



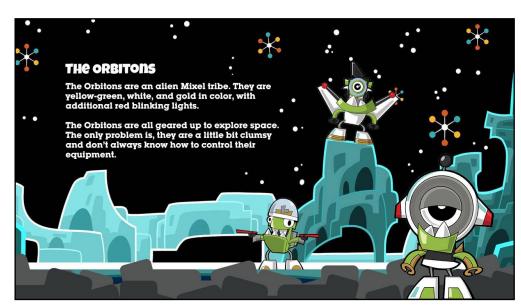
11. OK pressed. Slideshow shows first slide. Gallery title is shown on the upper third. The publisher sets the slideshow to autoplay or not; in this case because there is text to read autoplay is set to off at the start.



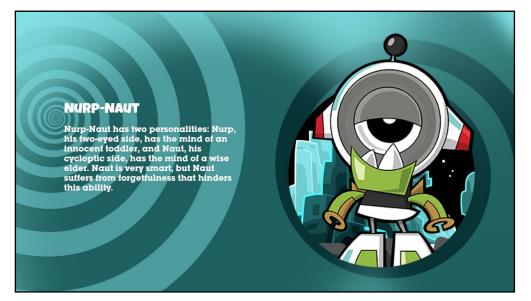
12. Overlay UI hides after 3 seconds. If the user presses play each slide is shows for 6 seonds each.



13. SKIP FORWARD pressed. Next slide appears.



14. The user launches another slideshow by going back to the menu and pressing OK on another tile.



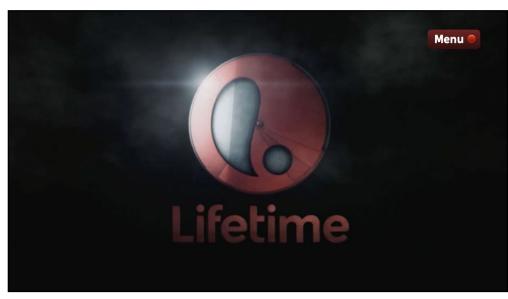


15. SKIP FORWARD pressed. Next slide appears.

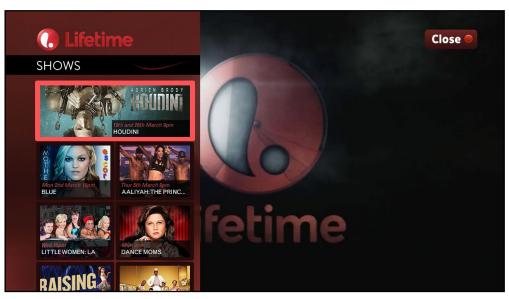
16. OK pressed on on-screen back button.

Lifetime Network

0:00 / 0:30

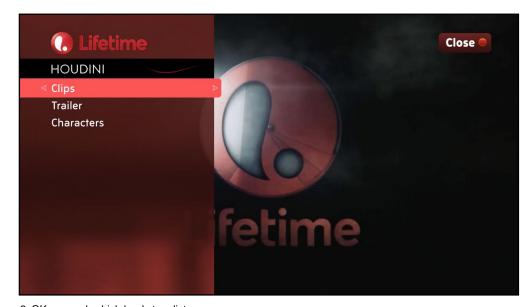


1. App launched, and video playlist starts automatically. The video or videos loop indefinately, serving as a barker channel.



2. RED pressed, launching the menu overlay. A Grid Menu displays tiles which represent programmes, and link to programme related videos and slideshows.

Lifetime Movie Houdini 30" International Promo (1/2)



4. OK pressed. Video playlist autoplays.

Back

3. OK pressed, which leads to a list menu.

Lifetime Network



5. Overlay UI hides 3 seconds after video starts playing.



6. The next asset in the playlist. Although videos automatically play in sequence the playlist does not loop. When the playlist ends the user is returned to the launch point.



HOUDINI

Clips

Trailer
Characters

Fetime

7. LEFT pressed 4 times.

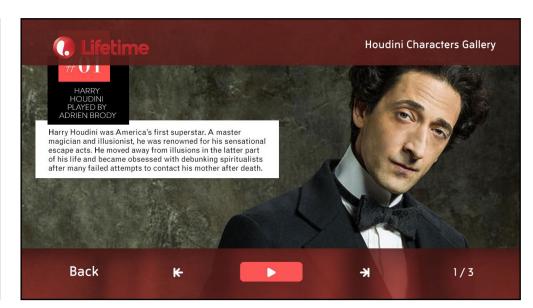
8. OK pressed.

Lifetime Network



9. DOWN pressed 2 times.





10. OK pressed. Slideshow is launched (autoplay is set to off).



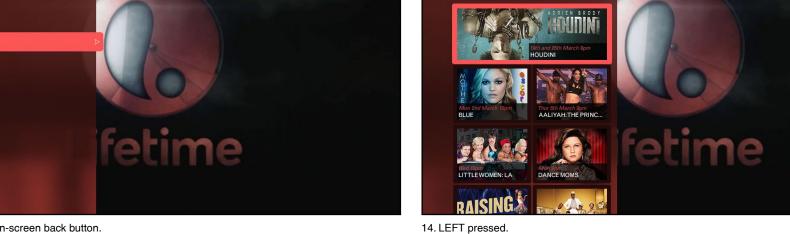
12. SKIP FORWARD pressed.

11. Overlay Ui hides after 3 seconds.

Lifetime Network

Close •





13. OK pressed on on-screen back button.

SHOWS

Menu Overlay and full-screen background

Initial settings and RED button behaviour

launch with video: By default the app is launched with full-screen video in the background and the menu overlay is hidden. The RED button toggles the menu appearance.

launch with menu: The default behaviour may be overridden by the publisher to have the menu overlay appear straight away. With this setting the RED button only quits the app (use case: if there's no full-screen barker video to watch the menu can be presented immediately and the background can then be employed as a companion graphic to the right side of the menu. See 'Music OD' example on the next page)

Menu limits

The menu has a maximum of 5 levels and each level has a maximum of 50 menu items.





By default the RED button toggles the appearance of the menu overlay.





Pause and Play icons flash on the screen when pausing or playing the barker (video or slideshow background).

UI Element	Condition	Button	Action
All	Overlay is visible	OK	Flash the activated state of the on-screen button for 0.25 seconds of the current focus highlight. Execute the action or link associated with the button.
	Barker is playing	PAUSE	Barker pauses. Pause icon flashes for 0.25 seconds.
	Barker is paused	PAUSE or PLAY	Barker plays. Play icon flashes for 0.25 seconds.
	Overlay is hidden	RED	Show the menu overlay and swap the red prompt graphic (which usually reads 'close'). If this is the first time the menu is shown it shows the top level of the menu with the focus on the first slot (otherwise it shows the last state).
	Overlay is hidden	LEFT	Quit the app.
MENU	Overlay is visible	RED	By default this hides the menu overlay. If app is set to 'launch with menu' then this quits the app.

A 'barker' background is a full-screen background that is not live TV. It can be either a video playlist or a slideshow.

Slidshow limits

A slideshow has a minimum of 2 slides and a maximum of 50 slides.

Slideshow settings

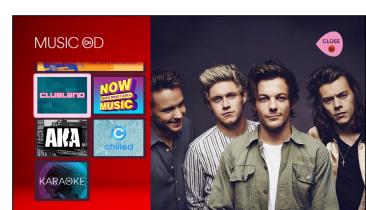
The default display time of each slide is 4 seconds. A publisher can override this to an alternate setting (use case: if there is text on the slides the publisher may want to set longer display times so the user can read it).



Example of video barker.







'Barker' background types: video playlists and slideshows

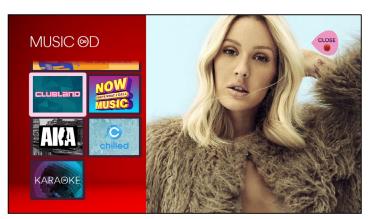
UK Play

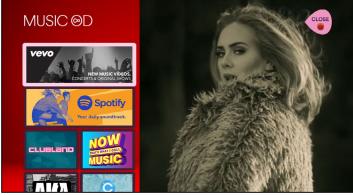
Dave

DRAMA

GOLD



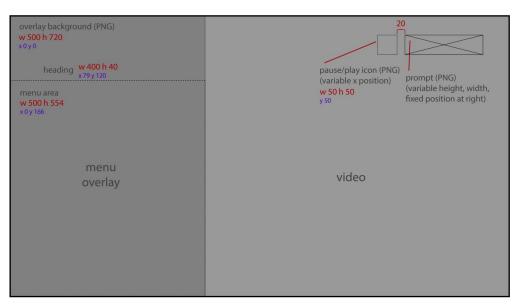




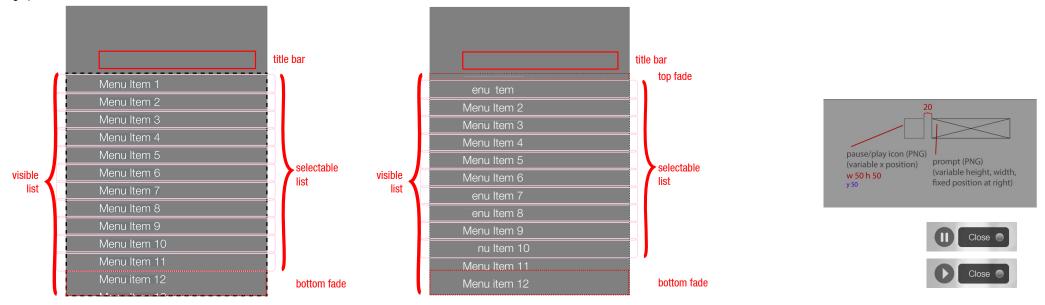
Example of slideshow barker showing 4 slides.

Menu Screen Menu Overlay: Text Lists





Text menu. The menu is scrollable and can have up to 50 menu items. The title bar can be hidden if not needed (eg. if there is only 1 menu level). Submenus have the last text selection from the parent as on the title bar. Long headings and menu items are truncated with an elipsis. The red button prompt graphic can be different widths and height, but the pause/play icon graphics are 20px to the left. List font, Heading Font, and graphics are customisable.



First Position: On the first page before the user scrolls.

Second Position: After the user scrolls down beyond the first page. The top fade appears on top of the text.

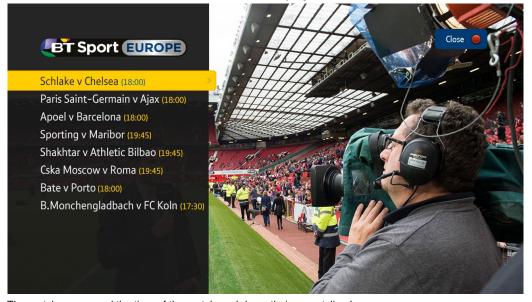
Prompt and pause/play icon examples.

Menu Overlay: Text Lists: multiple styles on a line

A text list menu may have two data types on any single line, in which case each type may have their own styling so they can be differentiated.



The event name and the event state each have their own styling above.



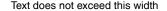
The match names and the time of the match each have their own styling here.

Menu Overlay: Text Lists: overflow behaviour

There may be a menu listing which is longer than the width of the left hand text menu. In these instances the line will be truncated and the overflow will be indicated with an elipsis. When in focus the listing string will crawl across the menu so that long strings can be read in full. If there is additional metadata at the end of a line (eg. data of a different type like the event states "Watch now" and "Book now") the extra metadata text will remain static at the end of the line. There is a 0.5 second delay from when a line is in focus before the crawl begins.









Text does not exceed this width. The event state (Watch now and Book now) determine the width of the visible text.

Example 1









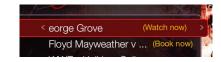


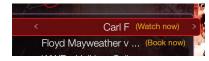
Example 2



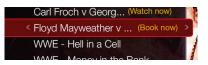








Example 3











Menu Overlay: Text Lists: Metadata preview



Close Root or Parent Title Duration, Rating, Year Epsiode Name 1 Synopsis here...Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam pellentesque nisi sit amet urna accum... Epsiode Name 2 Epsiode Name 3 Epsiode Name 4 Epsiode Name 5 Epsiode Name 6 Epsiode Name 7 Epsiode Name 8 Epsiode Name 10 Epsiode Name 11 Epsiode Name 12 Epsiode Name 13

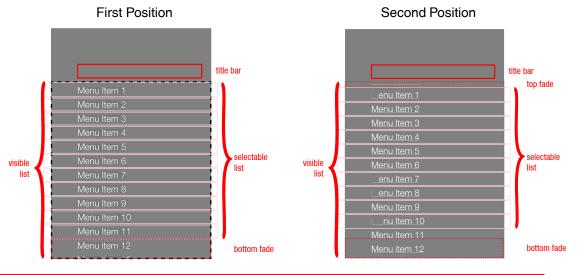
The metadata preview is a pop up which informs the user of the duration, rating and year with a synopsis of the show in a text list menu. The purpose is to allow the user to make a decision if they wish to watch the show before exiting the app. This pop up only displays when the menu item in focus is an episode on a VOD menu.

Pop-up moves with the focus highlight, remaining directly to the right.

Scrolling and paging of menu lists

A menu list is an interactive column of evenly spaced rows of text. The visible list, made of slots, displays one page of the menu list at a time. The slots between the fade regions are selectable (note that the top slot is selectable on the first page, but unslectable on subsequent pages). If the menu list has more rows than the slots in the selectable list then the menu list must 'page' so that the user can view and select all the menu items.

Scrolling is the movement of the focus a list item at a time by pressing UP or DOWN. Paging is traversing the menu list beyond the visible list through a single action (up to one selectable area of menu items at a time), either by using the CHAN UP or CHAN DOWN buttons, or by pressing UP on a topmost selectable slot when there are more menu items above or DOWN on a bottommost selectable slot when there are more menu items below.



UI Element	Button	Action
Menu List	OK or RIGHT	If the current menu item in focus is a link to an asset (eg. picture or video) then play the linked slideshow or video playlist in the Media Player. Else if it is a link to a submenu then load it and move the focus to the topmost slot, and update the title bar text to show the name of the previously selected menu item.
	LEFT	If the menu in focus is a submenu then load the parent menu restoring the previous screen state (ie. the parent menu item returns to focus and the title bar updates to show the name of the parent menu). If there is no parent menu then BONK.
	DOWN	If the focus is on the last menu item then BONK. Else if the current focus is on the bottommost slot on the selectable list and and there is at least another full selectable list below then redraw the visible list with the next menu item in the top slot of the selectable list (the menu item that was in focus is now seen in the top fade region, which is visible from page 1 onwards, and the focus on slot 2). Else if the current focus is on the bottommost slot on the selectable list and and there is less than another full selectable list to follow then redraw the visible list so that the selectable list is full, with the last menu item on the bottommost selectable slot, moving the focus to the next menu item (which may be in the middle of the visible list). Else move the highlight one row down to the next menu item.
	UP	If the focus is on the first menu item then BONK. Else if the current focus is on the topmost slot on the selectable list and and there is at least another full selectable list preceding it then redraw the visible list with the previous menu item on the bottommost slot of the selectable list. The menu item that was in focus is now seen in the bottom fade region, (which is visible at all times). Else if the current focus is on the topmost slot on the selectable list and and there is less than another full selectable list preceding it then redraw the visible list so that the selectable list is full, with the first menu item on the topmost selectable slot, moving the focus to the previous menu item (which may be in the middle of the visible list). Else move the highlight one row up to the previous menu item.
	CHAN DOWN	If the focus is on the last menu item, then BONK. Else if the bottommost selectable slot is the last menu item then move the focus to the last menu item. Else if below the visible list is at least another full selectable list then redraw the visible list so that the menu item that was in the bottom fade region, (which is always visible) is now on the topmost slot of the selectable list. Else if below the visible list is less than another full selectable list then redraw the visible list so that the selectable list is full, with the last menu item on the bottommost selectable slot, moving the focus to the menu item that was in the bottom fade region (which now may be in the middle of the visible list).
	CHAN UP	If the focus is on the first menu item, then BONK. Else if the topmost selectable slot is the first menu item then move the focus to the first menu item. Else if above the visible list is at least another full selectable list then redraw the visible list so that the menu item that was in the top fade region is now on the bottommost slot of the selectable list. Else if above the visible list is less than another full selectable list then redraw the visible list so that the selectable list is full, with the first menu item on the topmost selectable slot, moving the focus to the menu item that was in the top fade region, which is visible from page 1 onwards (which now may be in the middle of the visible list).
	SKIP FORWARD	If the focus is on the last menu item then move to focus to the first menu item, redrawing the visible list if necessary so that the first menu item is on the topmost selectable slot. Else if the menu items are less than or equal to amount in the selectable list then move the focus to the menu last item on the bottommost selectable row. Else if the menu has more items than the selectable list then move the focus to the last menu item and redraw the visible list so that the last menu item is on the bottommost selectable slot.

Menu Overlay:Menu Grid: Grid layouts and image tiles



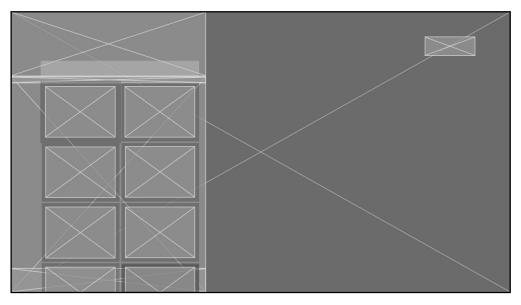
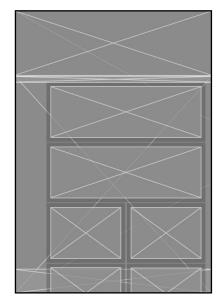
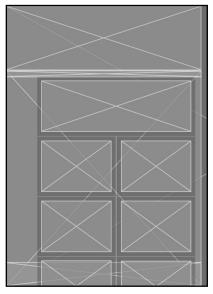


Image Grid Menu. Text is part of image. Menu is scrollable and can have a maximum of 50 items. Title bar can be hidden if desired. Any row can have wide tile that spans 2 columns. Heading Font and graphics are customisable.





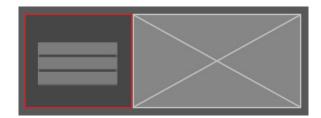




The Grid menu always has wide tiles before small tiles. For example, there could be just one wide tile followed by 10 smaller tiles or 5 wide tiles followed by 5 smaller tiles. Smaller tiles never appear before the wider tiles.

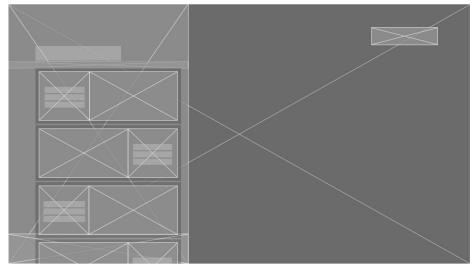
Menu Screen Menu Overlay: Menu Grid: Quick Tiles

Quick tiles are assembled from content which is pulled from a video host (like Brightcove) quickly without the need to use Photoshop. It pulls through the video, a video still and video title and create them into tiles as shown.



The title is vertically centered in the bounding box.







If there are multiple quick tiles in a column, the video title and title background alternate between the left and the right. The title backgrounds may cycle though a palette of re-defined colours to add variety.

Menu Overlay: Menu Grid: Image Tiles and Quick Tiles together



1a. Image tile example with highlight on wide tile



2a. Quick tile example with highlight on first tile. User can see there is content to scroll down to because image at bottom is cropped.



1b. Image tile example with highlight on smaller tile.

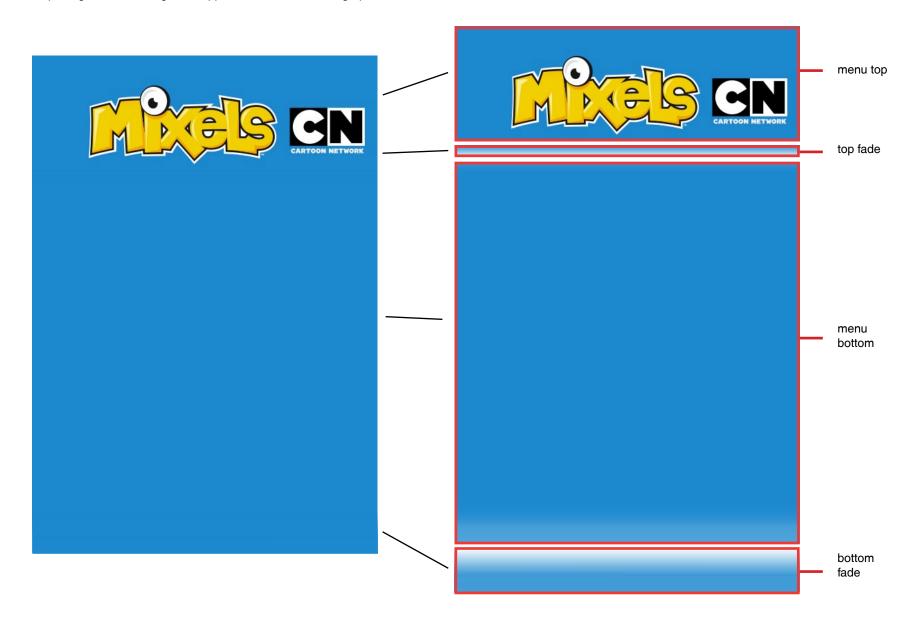


2b. Quick tile example shows user has scrolled down. Top wide tile is now faded to show the user has scrolled.

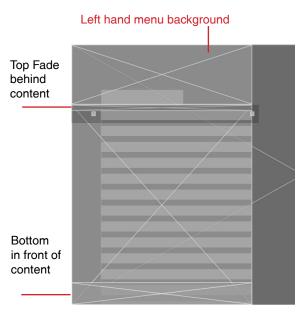
Menu Screen

Menu background

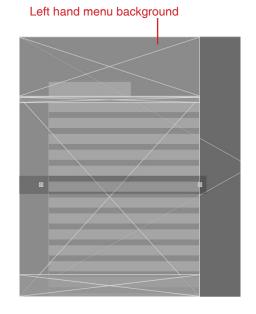
The Menu background is made of 4 pieces. This is so the top and bottom fades can be placed in front of menu items when there is an overflow and behind menu items when there is no overflow. When the pieces are put together the background appears to be a seamless graphic.



Menu Screen Menu background: text lists

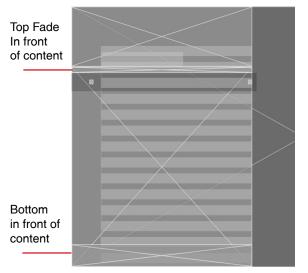




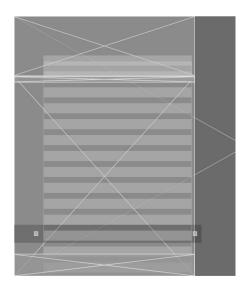




First position: The bottom fade is in front of the content, but the top fade is behind the content.



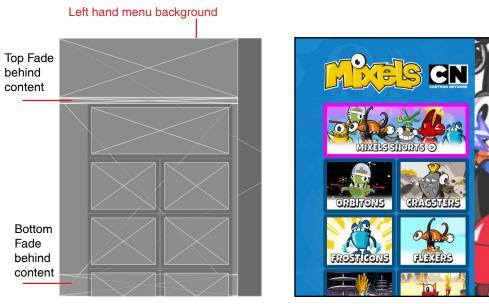




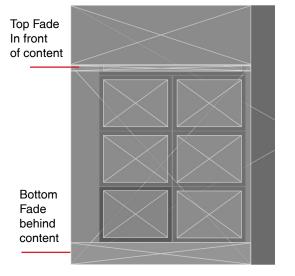


Second position (on a page other than the first): The bottom fade is in front of the content, but the top fade is now in front of the content.

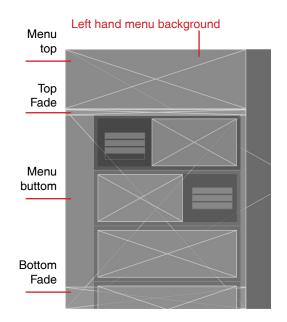
Menu background: grid tiles



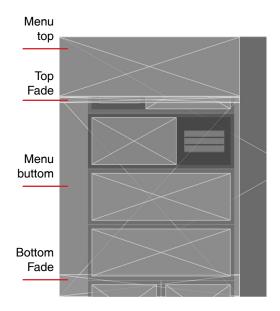
First position: The bottom fade and top fade are behind the content.











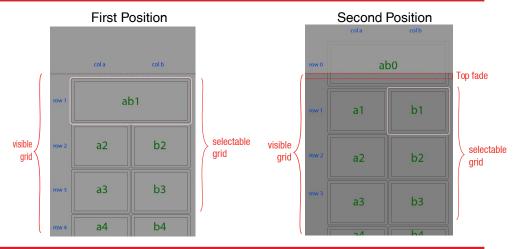


Second position: The top fade is now in front of the content.

Scrolling and paging of menu grids

A menu grid is an interactive matrix of evenly spaced rectangles. The visible grid, made of slots (referenced by row and column), displays one page of the menu grid at a time. The first 3 rows are selectable. If the menu list has more rows than the slots in the selectable grid then the menu grid must 'page' so that the user can view and select all the menu items.

Scrolling is the movement of the focus a grid item at a time by pressing UP or DOWN. Paging is traversing the menu grid beyond the visible grid through a single action (up to one selectable area of grid items at a time), either by using the CHAN UP or CHAN DOWN buttons, or by pressing UP on a topmost selectable slot(s) when there are more menu items above or DOWN on a bottommost selectable slot(s) when there are more menu items below.

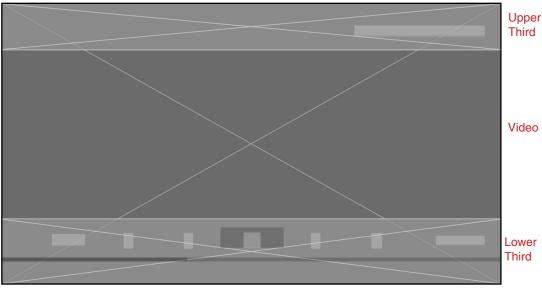


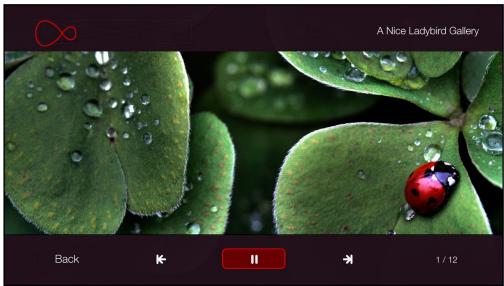
UI Element	Button	Action
Menu Grid	OK	If the current menu item in focus is a link to an asset (eg. picture or video) then play the linked slideshow or video playlist in the Media Player. Else if it is a link to a submenu then load it and move the focus to the topmost slot, and update the title bar text to show the name of previously selected menu item.
	LEFT	If the focus is on column a and the current menu is a submenu then load the parent menu restoring the previous screen state (ie. the parent menu item returns to focus and the title bar updates to show the name of the parent menu). Else if the focus is on column a and the current menu has no parent menu then it moved the focus to column b in the row above. Else it moves the focus to the next slot a left in column a.
	RIGHT	If the focus is on the bottommost and rightmost slot then BONK. Else if the focus is on column b then it moves the slot to column a in the row below. Else it moves the focus to the next slot at right in column b.
	DOWN	If the focus is on the last row of the entire menu then BONK. Else if the current focus is on the bottommost row of the selectable grid and and there is at least another full selectable grid below then redraw the visible grid so that the below menu item shifts up to row 1 (a tiny bit of the bottom the menu item that was in focus is now seen above row 1, and the new focus moves to row 1 in the same column). Else if the current focus is on the bottommost row on the selectable grid and and there is less than another full selectable grid below then redraw the visible grid so that the selectable list is full, with the bottommost menu item on the bottommost selectable slot, moving the focus to the next menu item below (which may be in the middle of the visible grid). Else move the highlight one row down to the next menu item below, either in the same column if the column is populated or in the alternate column if the column below is unpopulated.
	UP	If the focus is on the first row of the entire menu then BONK. Else if the current focus is on the topmost row on the selectable grid and and there is at least another full selectable grid above then redraw the visible grid so that the belows menu item shift down to row 3 (the menu item that was in focus is now seen in row 4, and the new focus moves to row 3 in the same column). Else if the current focus is on the topmost row on the selectable grid and and there is less than another full selectable grid above then redraw the visible grid so that the selectable grid is full, with the topmost menu item on the topmost selectable slot, moving the focus to the next menu item above (which may be in the middle of the visible grid). Else move the highlight one row up to the next menu item above.
	CHAN DOWN	If the focus is on the last row of the entire menu then BONK. Else if the bottommost selectable row contains the last menu item then move the focus to the last row, either in the same column if the column is populated or in the alternate column if the column is unpopulated. Else if below the visible grid is at least another full selectable grid then redraw the visible grid so that the menu item that was in row 4 is now in row 1 (the focus remains in the same position). Else if below the visible grid is less than another full selectable grid then redraw the visible grid so that the selectable grid is full, with the last menu item in row 3 (the focus remains in the same position).
	CHAN UP	If the focus is on the first row of the entire menu then BONK. Else if the topmost selectable row contains the first menu item then move the focus to the first row in the same column. Else if above the visible grid is at least another full selectable grid then redraw the visible grid so that the menu item that was above row 1 is now in row 3 (the focus remains in the same position). Else if above the visible grid is less than another full selectable grid then redraw the visible grid so that the selectable grid is full, with the first menu item in row 1 (the focus remains in the same position).
	SKIP FORWARD	If the focus is on the last menu item then move to focus to the first menu item, redrawing the visible list if necessary so that the first menu item is in row 1. Else if the number of menu items are equal or less than a full selectable grid then move the focus to the last menu item on the bottommost selectable row. Else if the number of menu item is greater than a full selectable grid then move the focus to the last menu item and redraw the visible list so that the last menu item is in row 3.

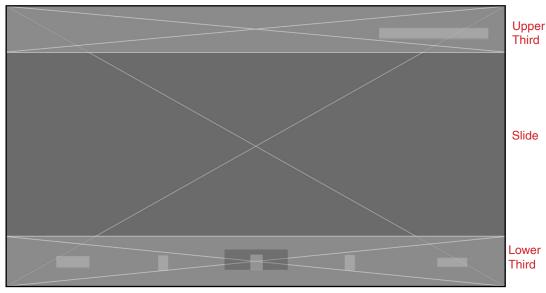
Media Player Screen

Media Player









Media Player, showing a video playlist and slideshow. It's similar to one recently built for VM Cloud, using upper and lower third overlays. Fonts, the colour of the progress bar, and graphics are customisable. In the upper third a video playlist displays how many videos are in the playlist at the end of the video asset name. Slideshows show the gallery name only. Slideshows autoplay by default but can also be set to manual advance at the start.

Media Player

Media Time Display and Lower Third

Videos have a time display in the upper right corner.

Times are displayed with hour, minute, and seconds digits separated by colons, like so:

HH:MM:SS

If a time is less than 9:59 minutes then display M:SS. Else if a time is less than 59:59 then display MM:SS. Else if a time is less than 9:59:59 then display H:MM:SS. Else display HH:MM:SS

The media time display shows the current time and the duration separated by 2 spaces, a forward slash, and another 2 spaces. It is right justified. For example:

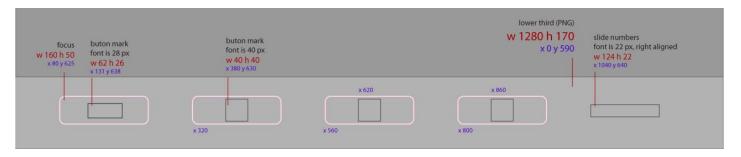
0:35 / 25:30

Slide Number Display

Slideshows display the current slide number and the total number of slides separated by 2 spaces, a forward slash, and another 2 spaces. Is is also right justified and shows no leading zeros. For example:

lower third (PNG) w 1280 h 170 x 0 y 550 font is 40 px font is 22 px, right aligned font is 28 px w 160 h 50 w 40 h 40 w 62 h 26 w 124 h 22 x 80 y 575 x 300 y 580 x 1071 y 590 x 131 y 588 x 460 x 620 x 780 x 940 x 240 x 400 x 720 x 880 progress bar / 0% progress 100% progress w 1280 h 10 x 0 y 650 BACK « >> 11 0:25 / 2:00

Video lower third. Shows progress bar and media time display at the right





Single video lower third. If there is only one video to play the skip buttons hide and position adjust accordingly.



Picture lower third. Slide number display at the right.

Media Player

Behaviour





UK Promo (2/2)

UK Promo

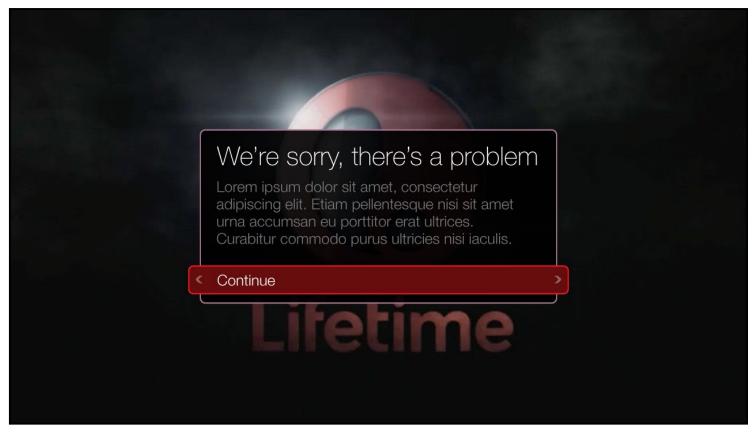
Video playlists have playlist numbers at the end of the asset name. But if there is only a single video there is no playlist number.

		Video Slide
Condition	Button	Action
If screen launches	n/a	Overlay UI timeout sequence: overlay UI (upper and lower thirds) is visible. If asset takes a while to load the overlay UI should stay on. Once asset has downloaded (eg. picture visible or video stream started playing) then a 3 second timeout countdown starts. After 3 seconds the overlay UI hides. If the user presses a button then start the sequence again. Autoplay: by default the video playlist or slideshow autoplays, but the publisher may set it to manual (eg. if the slides have a lot of text on them the user will want to advance them at their own reading speed). Slides in a slideshow play for 6 seconds each.
If single video	n/a	There are no on-screen skip buttons on the lower third and there are no video playlist numbers on the upper third.
Else if next asset in a playlist launches	n/a	Upper Third appears for 3 seconds, then hides.
Last asset finishes playing	n/a	Returns the user to the screen state that launched the Media Player Screen.
Else if lower third is hidden	D-PAD, COLOURS, THUMBS, NUMBERS †	Show overlay UI and start timeout sequence (described above). If the user presses a button then start the timeout sequence again.
	INFO	Upper third appears for 3 seconds, then hides.
	TRICKPLAY *	If an on-screen equivalent of the remote button exists on the screen then shows overlay UI and moves the focus to said button, activating it.
Else if lower third is visible	OK	If focus is on 'Back' then it stops playback and returns to the screen state that launched the Media Player Screen. If on a transport button (skip, rwd, ffwd, play/pause) then execute the associated action (same behaviour as when a remote control trickplay button is pressed. See below).
	UP, DOWN	Hides the overlay UI immediately, without Overlay UI timeout sequence.
	LEFT	If the focus is on the leftmost button then BONK. Else moves the focus to the next selectable button on the left.
	RIGHT	If the focus is on the rightmost button then BONK. Else moves the focus to the next selectable button on the right.
	PAUSE	If a single picture not part of a slideshow then BONK. Else if a video is playing or a picture slideshow is playing then pause them, and move the focus to the pause/play button changing its button mark to the play symbol. Else if a video or song is paused or a picture slideshow is paused then play them, and move the focus to the pause/play button changing its button mark to the pause symbol.
	PLAY	If a video is paused or a picture slideshow is paused then play them, and move the focus to the pause/play button changing its button mark to the pause symbol.
	STOP	Stops playback and returns to the screen state that launched the Media Player Screen.
	REWIND	If a picture then BONK. Else if a video then jumps back in the playback 6% of the total running time and continues playing, updating the current time display and progress bar accordingly, and it also moves the focus to the on-screen fast forward button.
	FAST FORWARD	If a picture then BONK. Else if a video then jumps forward in the playback 6% of the total running time and continues playing, updating the current time display and progress bar accordingly, and it also moves the focus to the on-screen fast forward button.
	SKIP BACK	If a single asset then BONK. Else if a picture then displays the previous picture and continue the slideshow, updating the slide number display accordingly, and it also moves the focus to the on-screen skip back button. Else if a video then it starts playback of the previous asset in the playlist, updating the current time display and progress bar accordingly, and it also moves the focus to the on-screen skip back button.
	SKIP FORWARD	If a single asset then BONK. Else if a picture then displays the next picture and continue the slideshow, updating the slide number display accordingly, and it also moves the focus to the on-screen skip forward button. Else if a video then it starts playback of the next asset in the playlist, updating the current time display and progress bar accordingly, and it also moves the focus to the on-screen skip forward button. If on the last asset in a playlist it should restart the playlist, else if the user is idle the playlist ends and the user is returned to the launch point.

^{*}TRICKPLAY is PLAY, STOP, PAUSE, REWIND, FAST FORWARD, SKIP BACK, SKIP FORWARD, and SLOW.
† D-PAD is UP, DOWN, LEFT, RIGHT, OK; COLOURS are RED, GREEN, YELLOW, BLUE; THUMBS are THUMBS UP and THUMBS DOWN; NUMBERS are 0-9 buttons.

Pop Ups

Pop Ups



A generic error message. Note that there is only one overlay on the video at a time, and that pop-ups to do not cover other overlays.