Ziris™ Canvas
Custom Video Wall Solution
Images matter more than ever.

To attract attention in today’s increasingly fast-paced world, moving images are replacing static, text-based communications. But as image-based communications such as video walls have become more prevalent, their impact has diminished.

Releasing imagination
Ziris Canvas is the next-generation Digital Signage solution that breaks down the traditional concept of video walls. Extraordinarily powerful and configurable, it enables you to engage with your audience, drive customer interest and attract attention in an imaginatively new and exciting way.

Created for forward-looking businesses that are keen to attract and influence audiences, add value to their offerings and strengthen loyalty to their brands, Ziris Canvas delivers unprecedented impact.

Whatever the application – from retail and entertainment to business and sport, from exhibitions and public spaces to travel, education and the arts – Ziris Canvas transforms environments into highly engaging audience experiences.
Unlimited creative possibilities

Ziris Canvas gives you the freedom to create eye-catching screen layouts, with each screen in HD resolution and in any size, shape and orientation. Using the phenomenal power of the Cell Broadband Engine™ within the PlayStation®3 (“PS3®”) system customized for Digital Signage, Ziris Canvas ensures your image quality always delivers stunning visual impact.

Unlimited HD resolution
Because each screen within a Ziris Canvas system is driven by our Cell Broadband Engine, there is no limit to the number of screens you can use. Images and video can be shown in unlimited HD quality across as many screens as you want.

For example, you could have a configuration of 5 screens wide by 5 screens high, giving you a total pixel resolution of 5400 x 9600. Your video content can run on each of the individual screens or be scaled to run across all screens at the same time. As each screen is driven a Cell Broadband Engine, you can add as many screens to your video wall as you want – giving you unlimited possibilities for screen design, with each one at HD resolution.

Unlimited screens in unlimited configurations
By removing the restrictions on the number of screens, their positioning and their orientation, Ziris Canvas lets you unleash your creativity. Giving you the freedom to build video walls on a new scale – to whatever size you choose – opens up opportunities not only to communicate with larger numbers of viewers, but also to heighten the dramatic impact of your messaging.

Your creative team can not only combine portrait and landscape formats of any size, they can also position each screen at whatever angle they choose to create unique and captivating environments.

The flexibility built into the content authoring process enables you to combine both higher than HD and stretched HD media. Plus, you can have the same content across all your screens, different content on each screen, or any combination of both.

You can have any screen configurations you choose – from concentric circles to a corner set-up with adjacent groups of screens on the floor, the walls and even the ceiling to create a totally immersive 3D effect. With the power to display video content that interacts between each group of screens, the impact is extraordinary. Audiences can be drawn into your communications – experiencing a sense of participation rather than just observation.

By encouraging creativity that breaks traditional boundaries, Ziris Canvas equips you with limitless artistic possibilities for deeper audience involvement. Your brand is perceived as more engaging and innovative, the profile of your venue is raised and loyalty is strengthened.

The power of PlayStation3
Driven by a PS3 Cell Broadband Engine, Ziris Canvas has immense video processing power. With its operational stability and stunning graphics capability robustly proven through gaming and media center applications – and a maximum video bit rate of 41 Mbps – the PS3 Cell Broadband Engine, delivers engagingly smooth, accurate HD image rendering.

You can display multiple, related content elements such as images and logos next to video, and scrolling text can be overlaid without any quality degradation or image slowdown. Dolby Surround Sound audio can also be added, giving your audiences a total audio-visual experience.
Ziris Canvas gives you three approaches to artistic expression

1. Pre-render content for each screen
   - Define your screen layout
   - Prepare your ultra-resolution image
   - In ZIRIS Screen Cutter, cut out your image based on your screen layout and encode image sequence as individual HD videos

2. Stretch full HD content across multiple screens
   - Define your layout based on your desired creative expression, screen sizes and positioning plus space available
   - Prepare your HD content
   - Stretch your image in Ziris Create
Creating content for Ziris Canvas is no different from creating content for a single screen – except that your unlimited display options opens up a rich seam of creativity. While there are several layout templates pre-configured, you have the freedom to configure completely new, unique designs.

3 Rotate screens

Your sequence plays out as unlimited HD video with resolutions x times HD

You can rotate and arrange your screens – whatever their sizes – to create new and exciting screen designs that support your messaging.

4 Hybrid authoring

Your sequence plays out as scaled HD video or images.

Ziris Canvas allows you to mix different authoring methods making it extremely flexible to re-use existing content, modify play lists or combine unlimited HD content with “standard” HD content. Users can assign arbitrary rotations, reallocate content to screens, tweak content by adding an overlay, or create independent play lists per definable screen combinations.
Combining the power of Cell Broadband Engine customized for Digital Signage with user-friendly Ziris Digital Signage software, Ziris Canvas is intuitively easy to operate. From preparing content, layouts and targeted playlist scheduling with our powerful content authoring software, to playout and monitoring, everything is simple.

You can quickly and easily adapt and re-allocate content whenever you choose, letting you target your messages to take advantage of changing circumstances so that you maintain maximum relevance and impact.

Ziris Canvas is also highly scalable. As it supports an unlimited number of screens and playout devices, you can simply expand your installations as and when you want.

The infrastructure of a Ziris Canvas installation is simple. Each screen is connected to a single PS3 unit customized for Digital Signage. In turn, each PS3 unit is connected by a hub to the internet-based management software. The set-up for all Cell Broadband Engine units can be controlled by keyboard or by the console controller. The simplicity of this set-up enables you to get up and running quickly – so you can spend time exploring your creative possibilities rather than contending with complex wiring.
Technical specifications

System

BZSQ-VW01

- Ziris Screen Cutter: Screen Layout and Unlimited HD "cookie-cutting" software.
- Ziris Create: Authoring and scheduling software.
- Ziris Manage: Real-time monitoring and control software.
- Ziris Edge: Content delivery software platform.
- Ziris View PS3: Digital Signage player software for PS3 customized for Digital Signage running from Blu-ray disc.
- PS3 customized for Digital Signage (note that this is different from the standard PlayStation3 which is available to consumers).

Central software versions

- Ziris Create Canvas V1.11 build 4
- Ziris Manage Canvas V1.11 build 3
- Ziris Edge Canvas V1.11 build 3
- Ziris Screen Cutter V1.11 build 2

Ziris View PS3 video

PS3 customized for Digital Signage provides the following video outputs to connect to your display device:
- HDMI (preferred connection)
- Component
- S-Video
- AV (RCA Phono connectors)
- AV (SCART)

Ziris View PS3 audio

- HDMI
- Digital Out (Optical)
- AV (RCA Phono connectors)

Ziris View PS3 supported formats

<table>
<thead>
<tr>
<th>Image format</th>
<th>Extension</th>
<th>Maximum size</th>
<th>Other details</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPEG</td>
<td>.jpg</td>
<td>2048x2048</td>
<td>Baseline-only; Progressive: JPEG is not supported</td>
</tr>
<tr>
<td>PNG</td>
<td>.png</td>
<td>2048x2048</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Video format</th>
<th>Extension</th>
<th>Maximum size</th>
<th>Minimum duration</th>
<th>Maximum duration</th>
<th>Bit rate</th>
<th>Frame rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPEG 2 Elementary Stream MP @ HL</td>
<td>.mpg</td>
<td>1920x1080</td>
<td>1 second</td>
<td>2 hours</td>
<td>51 Mbit/s</td>
<td>Progressive: 23.976p, 24p, 25p, 29.97p, 30p Interface: 50i, 59.94i, 60i</td>
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<tr>
<td>MPEG 4 AVC HP @ Level 4</td>
<td>.mp4</td>
<td>1920x1080</td>
<td>1 second</td>
<td>2 hours</td>
<td>16 Mbit/s</td>
<td>Progressive: 23.976p, 24p, 25p, 29.97p, 30p Interface: 50p, 59.94p, 60i</td>
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</table>

<table>
<thead>
<tr>
<th>Audio format</th>
<th>Extension</th>
<th>Channels</th>
<th>Minimum duration</th>
<th>Maximum duration</th>
<th>Maximum Bit rate</th>
<th>Sample rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dolby Digital</td>
<td>.ac3</td>
<td>2.0 or 5.1</td>
<td>1 second</td>
<td>2 hours</td>
<td>640 kbit/s</td>
<td>48 kHz</td>
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Requirements

<table>
<thead>
<tr>
<th>Description</th>
<th>Limit</th>
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<tbody>
<tr>
<td>Minimum duration</td>
<td>5 seconds</td>
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<tr>
<td>Maximum duration</td>
<td>24 hours</td>
</tr>
<tr>
<td>Maximum concurrent progressive MPEG2 video items</td>
<td>2</td>
</tr>
<tr>
<td>Maximum concurrent interlace MPEG-2 video items</td>
<td>1</td>
</tr>
<tr>
<td>Maximum concurrent MPEG-4 AVC video items</td>
<td>1</td>
</tr>
<tr>
<td>Maximum concurrent audio items</td>
<td>2</td>
</tr>
<tr>
<td>Maximum bit rate for 1 MPEG2 video item</td>
<td>51 Mbit/s</td>
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<td>Maximum total bit rate for 2 MPEG2 video items</td>
<td>41 Mbit/s</td>
</tr>
<tr>
<td>Minimum gap before or after MPEG4-AVC video items</td>
<td>250 milliseconds</td>
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<tr>
<td>Maximum concurrent pixels of source media e.g. 1 full screen 1920x1080 images requires 2073600 pixels</td>
<td>12441600</td>
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PC requirements (the minimum requirements of the hardware platform on which you install Ziris Create, Ziris Manage or Ziris Edge)

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
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<tbody>
<tr>
<td>CPU</td>
<td>Intel Core 2 Duo 2 GHz or faster</td>
</tr>
<tr>
<td>RAM</td>
<td>2GB or greater</td>
</tr>
<tr>
<td>HDD</td>
<td>40GB or greater</td>
</tr>
<tr>
<td>GPU</td>
<td>WXGA (not NVIDIA)</td>
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