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Research

Evaluation of the Prysm Visual Workplace Solution (Part 2 - New Features and Functions)

Hands-on testing of a leading collaborative environment

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Background

Founded in 2005 (and known as Spudnik, Inc. until 2010), Prysm, Inc. is a privately-held, 300+ employee company headquartered in San Jose, California, with additional offices and experience centers in the US (Boston, Los Angeles, Chicago, Indianapolis, New York) and internationally (Belgium, India, China, the U.A.E., and the U.K.).

The company's original focus was the design and manufacture of large-format displays and video walls using Laser Phosphor Display (LPD) technology (invented and patented by Prysm in 2010). While still a part of the business, the company's current raison d'être is the development and sale of advanced collaboration / ideation solutions.

In Q2 2016, Wainhouse Research (WR) conducted a third-party assessment of Prysm's flagship offering – Visual Workplace (see evaluation results report). In May 2017, Prysm commissioned WR to review these recently added features: Quick Start, wireless screen sharing, and co-browsing (currently beta).

This document contains the results of our hands-on testing of these new Visual Workplace features.

Quick Start

As with all collaboration solutions, the benefit realized by a company depends heavily on how often the solution is used. To that end, Prysm reached out to some of its customers for insight into ways to make its solution more approachable and easier to use. The result of this effort was Quick Start.

Quick Start is a new operating mode within the Visual Workplace solution designed to launch on-the-fly ideation sessions.[1] Users simply walk up to the board and start working within an ad-hoc, single page workspace. No sign-in or preparation required.

The Quick Start welcome page (see image below) offers only three options:

Sketch – access a digital blackboard (dubbed the "Sketchboard" by Prysm) with a list of connected sources along the left side of the page.

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[1] The same Quick Start functionality is also available within a stand-alone product called Prysm Go, which includes the Quick Start software, a Prysm display, and an entry-level Prysm collaboration appliance).

Connect Device – opens the Sketchboard, but within the Sketchboard work area displays information about displaying content from connected devices (e.g. notebook PCs, mobile devices, etc.).

Sign-In – directs the user away from the home screen and to the Prysm login screen, allowing him to access his Prysm Workspaces and the full feature-set of the Prysm solution.

Sketch Functionality

Sketch does exactly what its name implies – allows users to draw on the digital Sketchboard. The Prysm Sketchboard (see screenshot below) supports the following:

- Free-form drawing using six different ink colors and three different line thicknesses
- Two forms of erase (one erasing a stroke, and one clearing the entire board)
- Dark blue (blackboard mode) or white (white board mode) backgrounds
- Enable / disable the on-screen grid
- End-session and return to the Quick Start welcome page
- Email an image of the Sketchboard content to one or more people

Note that the image containing the Sketchboard content also includes connected source content and any annotations on those content items (more on this later).


As one might expect, the Sketchboard looks and feels similar to the Annotation (essentially whiteboard) function available to logged-in users. In short – the Sketchboard worked quite well during our testing, providing a high quality, natural feeling black-boarding experience.

Connect Device Help Pages

To help users connect and display their wired and wireless (e.g. AirPlay, Google Cast) content sources, Prysm has included several help pages within the Quick Start work area (see images below).

Although Google Cast is also supported, there is currently no Google Cast help page within the system.
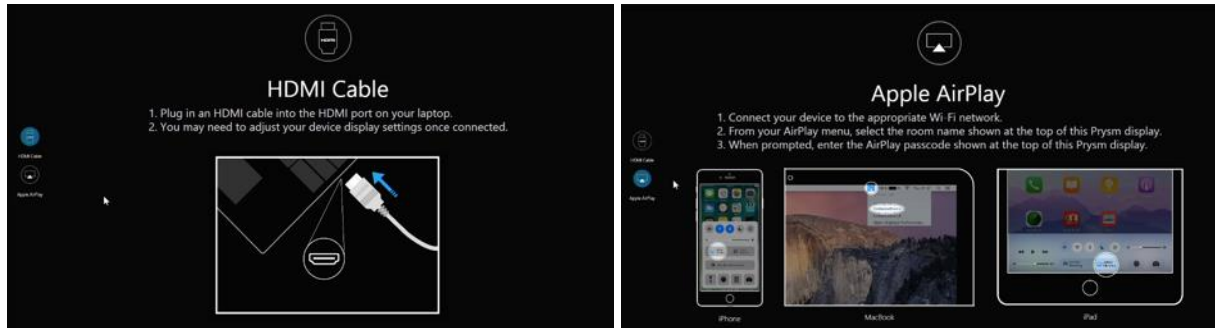
One minor nit – although these help pages are well designed, we found their placement within the system a bit confusing. For example, the Connect Device button on the welcome page looks more like a function than simply a quick way of accessing help information.

Display Connected Device

The left side of the work area includes a list of currently connected live sources (wired and wireless content sources). See image at right.

Touching one of these sources causes that source to be displayed as the background image within the work area. The user can then annotate on top of that live source image as shown below.

According to Prysm, the system supports up to twelve (12) wired (HDMI) live sources and up to four (4) wireless live sources.

We tested the ability to connect, share and annotate over live content using the following devices:

- Multiple Mac PCs and iOS devices using AirPlay (both with and without pin-codes)
- Multiple Windows PCs using Google Cast (within Google Chrome)
- Both Mac and Windows PCs using wired HDMI connections
- Multiple Android devices using Google Cast (within Google Home app) [2]

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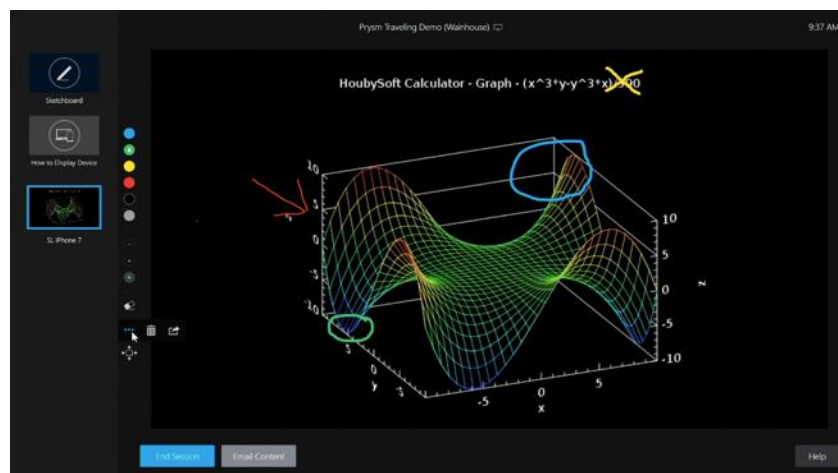
[2] While not officially supported by Prysm at this time, presenting with Google Cast worked during our testing.

Live content sharing from all wired sources and all Mac, iOS, and Android devices worked as expected, providing a solid content sharing and annotation experience. However, live content sharing using Google Cast (wireless presentation) worked from only one of our three Windows 10 PCs.

Author's Note on Wireless Presentation Protocols:

As a bit of background, AirPlay is a proprietary protocol developed by Apple that enables the sharing of content from Apple Mac and iOS devices over IP (usually wireless) to any device running an AirPlay server (e.g. AppleTV).

All Apple PC and mobile devices include native AirPlay functionality, and the AirPlay protocol includes support for requiring pin-codes in order to connect.

Google Cast is essentially Google's version of AirPlay. On PCs, Google Cast support is provided within the Google Chrome browser. On Android mobile device, Google Cast support requires the installation of a free app called Google Home.

AirPlay and Google Cast follow a workflow in which the client (e.g. notebook PC, mobile device) broadcasts a discovery message over the IP network to discover compatible servers that will accept a connection. All compatible servers that receive the discovery message then respond with a confirmation message including connection information. Unfortunately, not all IP networks are configured to allow the device discovery / response traffic.

Wireless Screen Sharing

In the past, users working within their Prysm Workspace (requires a user license and that the user log in) had access to wired live content sources from within the "hexagonal" menu (see screenshot below).

This access method worked fine when the number of connected sources was limited to four (the physical number of wired inputs on the Prysm appliance). With the addition of wireless screen sharing, the number of available sources could go as high as 16 (12 wired and four wireless). To address this issue, Prysm has introduced a new way to access connected sources – via the connected source list
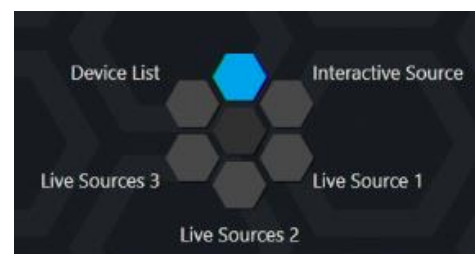

The connected source list displays both wireless (top area) and wired (bottom area) connected sources within a floating object (see screenshot below) that is always visible (on top of other active objects) on the Prysm display. This makes it quick and easy (one click only) for users to select and use live sources.

Within the Quick Start experience described above, selecting a live source causes that source to be displayed as a background image within the work area. As a result, only one live source can be displayed at a time.

While working within a workspace (after logging in), things are different. In this case, selecting a live source causes that source to be displayed <u>as an object</u> within the user's workspace. This allows users to select and use (display, annotate on, manipulate, etc.) multiple sources simultaneously (see image below showing a workspace with multiple live sources).

Clicking that same source again on the source list causes that source to pulse and become visible (if hidden behind other objects). This may sound gimmicky, but we need to consider that the Prysm environment allows users to open multiple objects at once (e.g. 5 whiteboards, 2 browser instances, 4 files for viewing / annotation, 3 sticky-notes, and now up to 16 live sources). With so many active objects, it is possible to lose sight of a source. This feature resolves this issue.

We tested this new workflow for viewing and selecting connected "live" sources, and it worked quite well. In fact, although it sounds strange, it is almost too easy to open many live sources (and other Prysm objects) at once.
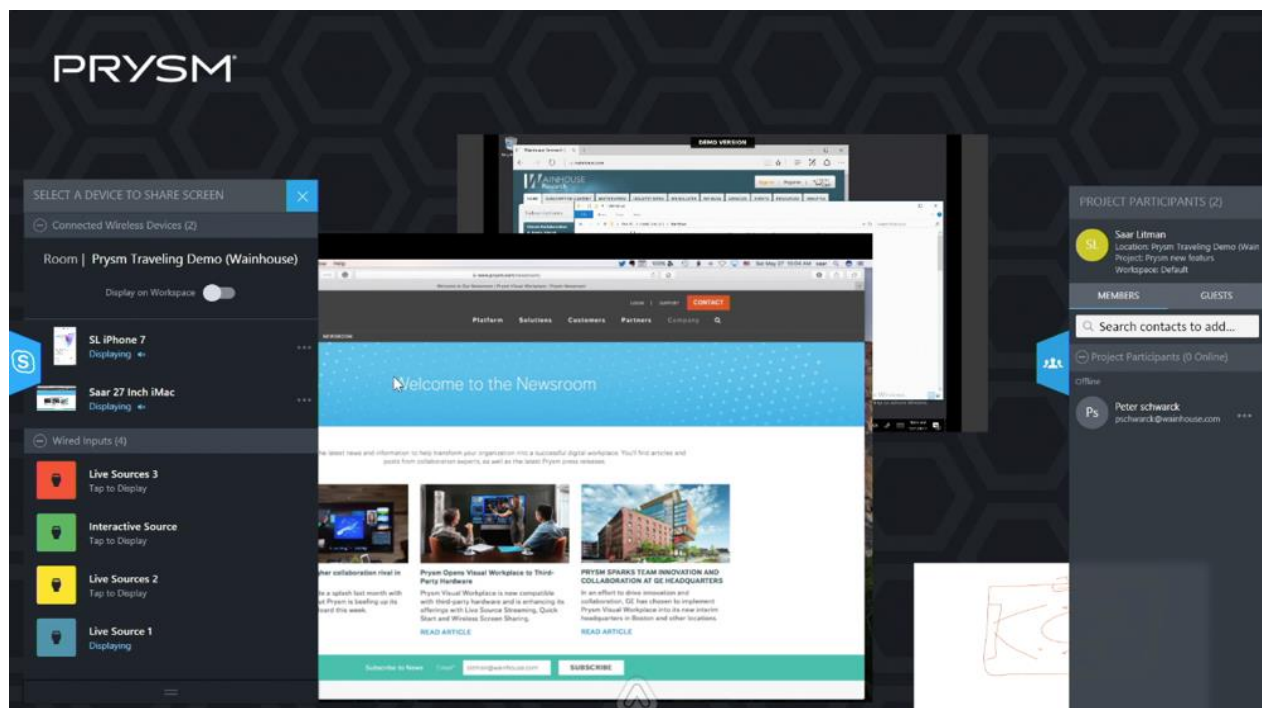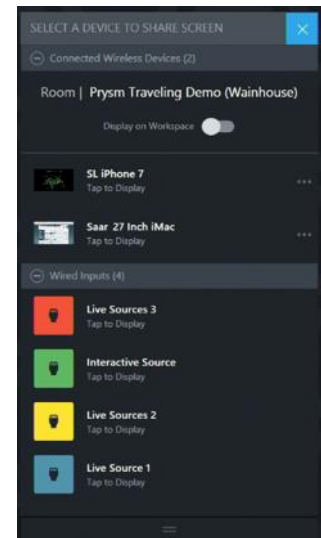
One minor nit – while we like the connected source list concept, the list takes up screen real estate that we would rather use for ideating and collaborating. To that end, we suggest adding the ability to auto-hide the list (this is already the case for the integrated Skype for Business app and Project Participant lists within the Prysm environment).

Co-Browsing Functionality

WR has noted increased user interest in sharing web content during ideation / collaboration sessions. While this sounds easy enough, this represents a significant challenge for collaboration vendors.

In the past, Prysm users could open a browser instance and "share" that instance with remote users. However, this was not a true collaborative experience as each user essentially had his own local view of the web content.

Viewed another way, the various browser instances displayed within the session were not connected to each other. And while going to a new URL / web page would redirect all users to that web page, any user interaction on that web page (e.g. scrolling, entering text, etc.) would not make its way to the remote participants. In addition, accessing a site that requires authentication (e.g. Salesforce.com, Netsuite, 3D modeling viewers, etc.) required each user to enter his personal credentials.

As a part of this testing effort, Prysm gave WR access to a beta feature dubbed co-browsing that addresses the above issue. With co-browsing, when a user opens a browser instance, that instance is actually created as a virtual browser instance within the Prysm cloud. This centrally located virtual browser object is then streamed (rendered) locally for each Prysm display and remote user.

With co-browsing, the user who created the co-browsing instance has access to a handful of capabilities. For example, the owner of a co-browser session can enable remote users to manipulate (e.g. scroll, enter text, etc.) the virtual browser window. In addition, the co-browsing session owner can enter his credentials into the virtual browser instance (e.g. log into the company's ERP system or a cloud service like Salesforce.com), at which point all users see the owner's "logged-in" view of that website – all without requiring the user to share his password or store his credentials on the Prysm device.

As an added bonus, the Prysm system also securely stores user-specific, site-specific cookies within the Prysm Cloud. This offers several cookie-related benefits:

- If the user re-visits that same page later, he will not have to re-enter his credentials

- If the user opens more than one co-browsing instance at a time, each co-browsing instance will use the same previously stored cookies

And perhaps most importantly, the fact that the cookie is user-specific means that other users working within the same workspace / project will not have access to the cookie and that user's credentials.

As a part of this effort, Prysm gave the WR test team access to a non-public beta version of co-browsing within the Prysm Mobile software, which allowed us to test this function for PCs and mobile users only – not for Display users. While not perfect (this is beta code after all), co-browsing worked quite well during our testing.

We created co-browsing instances from numerous browsers on Windows and Mac PCs, as well as iOS and Android tablets. In almost all cases, the system – including the innovative centrally stored cookie concept – worked as expected.

(The image at right shows the Prysm Mobile Tools menu including the ability to open a co-browser instance.)

On a more critical note, our testing revealed a few hiccups. First, co-browsing currently supports up to 720p resolution only. In addition, co-browsing instances are not as responsive as local browser instances. Also, the cloud-based virtual browser engine is lacking some common browser features (e.g. plug-ins like Flash). Finally, because the co-browsing instance actually resides in the Prysm Cloud, it may not be possible to access some websites (e.g. company Intranets, on-premises ERP systems, etc.) due to network security / firewalls. For such requirements, the standard Prysm browser sharing workflow must be used.

Analysis and Opinion

As avid and long-standing users of the Prysm Virtual Workplace solution, we were quite eager to test these new (and beta) features. Overall, we were pleased by what we saw.

Prysm Quick Start looks good, feels good, and makes the Prysm solution feel more friendly and approachable for new users. Experienced users (like the WR team) will appreciate the quick access to the digital Sketchboard. In fact, we now use the Quick Start Sketchboard on a daily basis.

The newly added wireless presentation capability makes it quick and easy to bring live sources, including personal user / BYO content (e.g. from mobile devices), into the Prysm experience – without the need for an external wireless presentation system. And the new "show a source" workflow is fast – almost too fast if you know what we mean.

Furthermore, we like the Prysm Co-Browsing concept as it provides a more feature-rich browsing experience to remote users. Finally, we appreciate Prysm's willingness to bring us (and now you) into its inner circle via this beta feature preview.

With these test results and ongoing innovation, it's no wonder that Prysm's Visual Workplace solution has earned its place as one of our go-to ideation solutions.

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About Wainhouse Research

Wainhouse Research, www.wainhouse.com, is an independent analyst firm that focuses on critical issues in the Unified Communications and Collaboration (UC&C). The company conducts multi-client and custom research studies, consults with end users on key implementation issues, publishes white papers and market statistics, and delivers public and private seminars as well as speaker presentations at industry group meetings.

About Prysm   (Copy provided by Prysm)

Prysm is defining a new way of work. One where applications, content, video conferencing and the Web can all be easily combined into a visual workspace where teams can create, edit and share. These interactive workspaces are stored in the cloud and available on any sized screen. Prysm's Visual Workplace solutions span from executive briefing center to home office — and every size workplace in between. Today, Prysm powers 20 percent of the Fortune 500 and our customers are leaders in all industries including technology, energy, finance, healthcare, media and universities. To define your company's new way of work, visit www.prysm.com.