

Digital Workplace Solutions - Overview

Prysm Application Suite

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ABOUT PRYSM SYSTEMS

Prysm Systems is defining a new way of work. One where applications, content, video conferencing and the Web can all be easily combined into a digital workspace where teams can create, edit and share. These interactive workspaces are stored in the cloud and available on any sized screen.

Prysm System's Digital 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 prysmsystems.com.

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Contents

Prysm Systems Digital Workplace Solution – Overview	4
Prysm Systems Digital Workplace Solution – Overview	4
2. Prysm Application Suite	5
2.1 Prysm Application Suite Features	5
2.2 Prysm Application Suite Add-on Options	
3. Prysm for Web	14
4. Prysm for desktop	15
5. Prysm Hosted Cloud	
3.1 Prysm Cloud Physical Environments	16
6. Prysm Displays	18
3.2 LPD 6K Series Digital Workplace for 100" + diagonal screen sizes	
3.3 LCD Digital Workplace	
7 Prysm Application Appliance Specifications	

Prysm Systems Digital Workplace Solution - Overview

1. Preface

The workplace is changing – transforming to align with how work gets done in today's post pandemic world. Traditional office spaces are being re-imagined with visual, digital technologies that spur faster insights and productivity. Meanwhile, many remote employees now define "office" as "anywhere." What is a workplace in today's digital age? More importantly, how can global teams collaborate to produce their best work regardless of everyone's location? Prysm helps solve these challenges.

Prysm's digital interactive collaboration solution combines enterprise applications, rich media content, video conferencing and the web into a digital workspace where teams can create, edit, and share ideas to drive innovation. The Prysm Application Suite is available via a Prysm Hosted Cloud configuration or as a Customer Hosted configuration on a customer's network. Regardless of delivery, the interactive workspaces are accessible to in-room and remote participants for complete engagement and alignment.

Prysm Systems Digital Workplace solutions are built on the integration of the Prysm Application Suite, the Prysm Systems Cloud, and Prysm Systems LPD6K Series Displays, or any other 3rd party LCD displays.



2. Prysm Application Suite

The Prysm Application Suite is dynamic software that combines applications, the web, and conferencing solutions into one seamless digital workspace for an experience that can be shared and simultaneously worked on by many users in many locations.

A summary of the standard features supported upgrade options and service options for the latest version of the Prysm Application Suite are described in the following sections.

2.1 Prysm Application Suite Features

The Prysm Application Suite is the software that powers the Prysm Digital Workplace. Multiple media objects, files, web browsers, live video sources (TV, video conference, streaming media players), in-room devices (smartphones, tablets, PCs), remote PCs, etc. may be displayed simultaneously. For additional information on various features, refer to the *Prysm End User Guide*, 520-00044-00.

2.1.1 Content Organization Tools

The Prysm Application Suite re-imagines the way teams meet and collaborate by enabling users to create collections of meeting content in organized and easily accessible digital libraries. These digital libraries or projects and workspaces help to better organize meetings and content, and enable increased productivity.



Projects and Workspaces

The collaboration experience is defined around projects and workspaces within projects. This allows different users/groups to save content, return to their workspace, and immediately pick-up from where they left off. Workspaces can be configured to presentation or interactive modes.

Dynamic Content Layout

Media and files can be freely moved and resized as desired by touch at the Prysm Systems display or via a wireless mouse/keyboard. Sources can be opened and accessed simultaneously and scaled to the desired size. Using personal devices like connected laptops or tablets, participants can also engage in a "contactless" experience to manage on-screen content.

Fixed Content Layout

Media and files can be automatically snapped to specific locations (using snap grids). This feature allows standard layouts of media and files to be defined and recalled on demand.

Media and File Display/Storage

Common enterprise media objects and file types (images, video, Microsoft Office files, etc.) may be uploaded and stored in the Prysm Cloud or locally for use in the Prysm Application Suite. Prysm Digital Workplaces linked to the cloud are automatically uploaded and replicated across collaboration end points.

- · Supported image files: PNG, JPG, GIF
- Supported video files: H.264 QuickTime video (.mov, .m4v, .mp4), Windows Media Video (.wmv, .asf)
- Supported document formats: Microsoft Word (.doc, .docx), Microsoft Excel (.xls, .xlsv), Microsoft Powerpoint (.ppt, .pptx), Adobe PDF

Third-party File Storage Providers

The ability to access content through commonly used third-party file storage providers from within the Prysm Application Suite greatly improves file accessibility and portability, and makes it clear to users that it is not just another file repository solution. Additionally, this feature gives users the ability to export the contents of a Prysm work session into those same authenticated file storage provider solutions, thereby increasing the effectiveness of Prysm's end-to-end workflow capabilities. A user can easily import and subsequently export any video files, pictures, screen captures or native file-based assets into and out of third-party file storage providers. The following providers are supported:

Microsoft OneDrive for Business: only supports Microsoft OneDrive for Business and does <u>not</u> support Microsoft OneDrive Personal accounts.

Box.com: all types of Box subscriptions (Free, Personal, Business) are supported. OAuth 2.0 Single Sign On (SSO) is supported.

DropBox: all types of *DropBox* subscriptions (Basic, Pro, Business, Enterprise) are supported. OAuth 2.0 Single Sign On (SSO) is only supported for Business and Enterprise subscriptions, *not* for Basic or Pro subscriptions.

Google Drive: All types of *Google Drive* subscriptions are supported. This includes G-Suite (*Google for Business*), Basic, Business, Enterprise and Education. Google Apps Free edition (i.e. individual customer accounts) is also supported.

For more information, refer to Section 2.2.1.

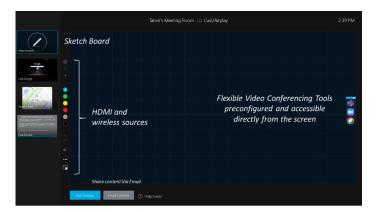
2.1.2 The Prysm Go Experience

Before now, casual users had no way to derive value from Prysm solutions without first logging in, which assumes they have been issued a user license and login credentials.

The Prysm Go Experience provides simple and inviting in-room options to ad-hoc or casual first-time users who wish to display their device output via wired or wireless methods (where supported/enabled) or sketch out a diagram or concept using a Whiteboard. Users may toggle between attached sources and a single whiteboard and may share content via email. Users who do not select an operational mode but connect their device via physical display connection or wirelessly (via Airplay or Google Cast) will be seamlessly shown the output of their device on the display. Prysm Go now supports dual and triple display configurations.

Launch+ Integration with Prysm Go

Launch+ supports your desired third part web video conferencing and collaboration applications with Prysm Go. Simply select the desired application in the Launch+ application to toggle between the desired applications. This allows users to quickly share content from Prysm Go on a Zoom, Teams, or Cisco WebEx call.



Video Conferencing (VC) Integration with Prysm Go

By allowing users to quickly join a call and broadcast the sketchboard or live sources, we give them an easy way to begin the onboarding process of using the Prysm Application Suite. In a legacy conference room not equipped with the Prysm solution, customers can use a whiteboard, display their computer, and make Video Conference (VC) calls. By adding video calling to the Prysm Welcome Screen solution, it gives them all of those features in one place and allows them to share that content with others.

- By allowing users to avoid a lengthy login process to quickly place a call, they can quickly achieve their goal of joining a call using integrated video conferencing.
- If a conference room is retrofitted quickly, new users will be able to walk into the room and quickly find what they are looking for
 to join a call. The user sees a familiar welcome screen and with the touch of one button it allows for a very simple and elegant
 on-boarding experience.
- New controls have been greatly simplified. Basic call controls provided which are always available during a call include: join call, end call, navigate the codec, D-pad, mute toggle, volume, and status.
- When a user wants to share their screen or sketchboard with call participants, they are able to enable broadcast zone and switch between sources, so that ideas can be effectively shared with others.
- When a user is broadcasting but wants to see the remote video conference participants, when the corresponding source is selected, the system prompts the user that viewing the remote participant video will disable the broadcast zone. That keeps the user from sending others in the call a broadcast of themselves.

2.1.3 Team Interaction

Collaboration tools bring the Prysm Digital Workplace to life by allowing dynamic control of content on the display for true team engagement.



Guest Mode

With Guest Mode, any licensed user may now invite and host up to 10 concurrent guests to view, contribute and interact remotely. This feature allows the following:

- Project Owners may enable/disable Guest Mode access to individual Projects. Once enabled, Project Participants may invite guests directly from within the Prysm Application Suite or from Prysm for web.
- Guests will receive an email invite with the name of the Project, Access Code and a discrete link. Guests may also access http://app.prysm.com and enter the Project Access Code.
- Once a guest has registered, they are placed in the Project Lobby and the host is notified that they want to be admitted to the project.
- · Once admitted by a 'Host', guests may view workspace content, participate in Follow-me sessions and contribute new files to the project.
- Process improvements have been added to allow Guest Users to become licensed Account Users.
- When the last participant exits the Project, all guests will be notified that the session has ended.

Follow Me Mode

Ensures that all interactions by the host in the workspace are presented to every participant.

Participant Panel

View a list of team members that are actively in the workplace and invite team members through the Participant Panel.

Real-time Multi-site Collaboration

Real-time and multi-site collaboration is supported on all file-based objects loaded into a project. As many as 25 Prysm Application Appliances or Prysm for web users can enter the same workspace and collaborate in real-time. Changes to the workspace by any user at any endpoint are automatically replicated across all other endpoints. This feature currently does not support the automatic routing of live video sources from one endpoint to another.

Markup and Annotation

Any media object or file displayed may be annotated by touch and saved for later reference. Annotation features include different colors, pen widths, typed text and erase capabilities.

Share/Email

Documents, images and videos (w/out annotation) that are present within a workspace can be shared through email directly from the video wall. They are attached as a Portable Network Graphics (.png) file to an email that is sent through a configurable SMTP server.

Snapshot

Any content displayed can be captured like a photograph as a duplicate version of the selected content. The Snapshot content is a .png image that can be used to add additional annotations by multiple team members, saved as a copy or shared by email. The Snapshot feature can also be used to capture a video frame or web page.

Browsers

There are two Prysm integrated browsers available; a **Standard** browser, and a **Co-browser**. For more information on the Prysm integrated browsers, refer to *Technical Bulletin - Prysm Integrated Browsers*, *551-00133-00*.

- The **Standard** browser allows for the display of web content and supports websites compatible with most web browsers. For information on web browser plug-in support, refer to the Application Upgrade Options Section.
- The Co-browser provides workspace participants (including Prysm for web users) with the exact same view of web content as the Prysm
 integrated browser. A "presenter" may log into multiple websites, navigate as desired, and even allow other participants to interact with
 their browsing session. When a Co-browsing presenter leaves a workspace, all of their Co-browsing sessions are automatically disabled,
 protecting the user's data.

Sketchboard

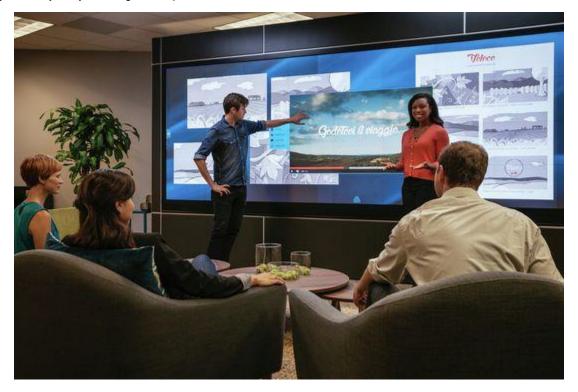
An enhanced touch-enabled sketchboard allows for freeform drawing and annotation. A multi-site shared sketchboard experience is supported.

Sticky Note/Text

Type or add colored type notes anywhere for easy tagging of important content discussed in the team meeting.

2.1.4 Live Source Integration Features

Audio and video components that are connected to the Application Appliance for use are known as live sources. Media players, TVs and in-room devices (smartphones, tablets, laptops, PCs, etc...) with standard HDMI inputs can be displayed. Up to 12 live video sources may be integrated depending on the Prysm Systems Digital Workplace.



Screen Sharing (In-room Device Mirroring)

Wireless

Popular third party solutions are employed to support the wireless transfer of video feeds from in-room devices to the Prysm video wall or display (screen sharing or device mirroring). Wireless Screen Sharing allows the user to share content from multiple devices (mobile phone, tablet, laptop, computer) via the native capabilities provided by Apple AirPlay and Google Cast. Additional wireless interface options will be added in the future.

Screen sharing utilizing Apple Airplay allows users on any Apple device to wirelessly share their content to a Prysm display. Apple Airplay utilizes built-in functionality of the Apple device to share content.

Screen sharing utilizing Google Cast is also supported, allowing users on any Windows or Mac device with a Chrome Browser installed to wirelessly share their content to a Prysm display. Google Cast utilizes functionality built into the Chrome Browser to share content.

In conjunction with a new Live Sources User Interface (list-based panel), Prysm users now have the ability to wirelessly connect up to four (4) devices and place their content anywhere on the workspace presented with the same aspect ratio in which their device is oriented. These four wireless sources are part of the total number of live sources that can be connected.

A customer network configuration that allows specific ports and protocols between a device and an Application Appliance is required. Screen sharing from Android devices and MiraCast are not yet supported.

A room/device pairing code is required in most cases, which may be optionally toggled so that it is persistently displayed to all participants in the same room. This code is reset at the conclusion of each user session to ensure the confidentiality of any displayed material or interruption by a user who recalls a code used during an earlier session.

Wired

In addition to the native Wireless Screen Sharing methods available within the Prysm Application Suite, additional third-party options may be integrated via hard-wired capture inputs. These signals must be supplied from the third party device to the Prysm Application Appliance via a standard wired video connection (e.g., HDMI or DVI).

Prysm users now have the ability to connect up to12 wired live source devices for Screen Sharing and place their content anywhere on the workspace presented with the same aspect ratio in which their device is oriented. These 12 wired sources are part of the total number of live sources that can be connected.

Device Sharing

Device sharing fulfills Prysm System's vision of 'Any Source, Anywhere' capabilities, ensures that participants located in other rooms or working remotely can simultaneously view the content displayed by devices which are connected (wireless or wired) to a Prysm display. Participants simultaneously accessing a Project from other displays or remotely via Prysm for web will have the same view of each device shared by the contributor.

- Device sharing functionality allows in-room participants to quickly share device content with remote participants in the same workspace.
- The total number of in-room live source devices that may be available to share is up to (4) wireless plus (12) wired devices.

The total number of in-room live source devices that may be available to share can be up to (16) devices within each workspace. As of this release however, you can only share up to two (2) of these devices (wireless or wired) at a time. The number of live source devices that can be simultaneously shared with other locations may increase in the future.

Note: There is a limit to the number of live sources that can be used simultaneously before the visual quality degrades. The rendered frame rate of each Live Source is configurable within a maximum aggregate of 150 fps across all simultaneously rendered live sources. For example, a video conference codec (1280x720 @ 60fps) + 3 Laptops (@ 1920x1080p @ 30fps each) would occupy 100% of the 150fps budget. Adding additional live sources to the canvas would cause the frame rate of all sources to noticeably degrade thereafter

Interactive Input Control

This feature allows the display and control of an in-room PC's content within the Prysm Application Suite. The in-room PC is connected to the Application Appliance through an HDMI video connection and a USB control connection. The in-room PC content displayed can be controlled directly from the Prysm Application Suite via touch or through a wireless keyboard and mouse.

- Supported operating systems include: Windows 7, Windows 8.1, Windows 10 and Mac OS.
- A single Interactive Input Controller (IIC) Kit may be included with each Prysm Digital Workplace as an option to allow a single in-room PC connection.

High-bandwidth Digital Content Protection (HDCP) is a type of digital copy protection that prevents unauthorized devices from playing HDCP-encrypted content. Prysm Application Suite software and the associated Prysm-branded hardware are HDCP compliant. That is, any content encoded with HDCP copy protection such as cable or satellite TV services, will result in a "format not supported" message being displayed when launched as a live source in the Prysm Application Suite.

Prysm QuadLynk

Prysm QuadLynk addresses the installation complexity and market demand for multiple devices to be displayed simultaneously on the latest Ultra-High Definition (UHD) LCD displays. The majority of enterprise rooms which are refit with a modern touch equipped 4K display are not equipped with the costly and complex video cabling or transceivers required to connect multiple devices which users bring into the room. To directly address this challenge, we have developed the Prysm QuadLynk, which simultaneously captures and transmits the video output from up to four devices via a single Ethernet connection (CAT5 or greater) which connects to the Prysm Application Appliance. When compared to other prevailing market alternatives, QuadLynk significantly lowers the hardware complexity and Installation costs associated with multi-source video transmission by utilizing common network cabling found or easily installed in each room.

- A Prysm QuadLynk simultaneously captures and transmits up to four (4) HDMI sources, at a maximum resolution of 1920x1080/30fps compatible with nearly all digital video sources, directly to the Prysm Application Appliance.
- Prysm QuadLynk provides scalable live video inputs limited only by network bandwidth, plus fewer cables for cleaner meeting rooms.
- Each Prysm QuadLynk has one Ethernet output which connects to the Prysm Application Appliance.
- The Prysm QuadLynk is powered by the provided DC power supply or can optionally be powered via its power-over-ethernet (POE)
 port which connects via a single ethernet output to the Prysm Application Appliance.

Video Conferencing

Prysm supports certain models of Video Conferencing (VC) codecs from Cisco and Polycom. A VC on-screen control panel can be used with Cisco C and SX series and Polycom Real Presence codecs. The VC control panel allows users to place (dial) and receive calls, perform camera control operations, and access device address book information.

- At least one (1) live video source input must be available for the codec to display the video conference window.
- The video conferencing codec must reside on the same network as the solution.
- Workspace content can be sent over the content channel of the VC codec to remote destinations with the addition of the Broadcast Zone
 upgrade option.

Note: Video Conferencing windows are not synchronized to remote endpoints. If you are viewing a video conference window on a workspace, only the local system will see that window.

VC Configuration Notes:

- At least one (1) live video source input must be available for the codec to display the video conference window.
- The videoconference codec must reside on the same network as the solution.
- Video conferencing windows are not synchronized to remote endpoints (VC windows on a workspace are not visible by remote endpoints).

2.1.5 Administration Features

The Prysm Application Suite for each Prysm Digital Workplace is customized based on the requirements of the end user. The Prysm Application Suite administration portal allows Prysm trained IT professionals to configure UI and application settings.



Account Security

Each Prysm Digital Workplace is deployed within a Tenant Account that enables each solution to be customized to each customer's needs. Customers who broadly deploy Prysm solutions are able to take advantage of the collaborative mirroring capabilities where any user can access their projects from Prysm solutions deployed across the enterprise. While settings may only be administered within the Account, users outside the organization may be invited to Projects and workspaces and must be hosted by a member of your organization. Customers with multiple Prysm Digital Workplace solutions can utilize the same account to enable the collaborative mirroring capabilities of the Prysm Application Suite. Users outside an account cannot view the projects, files or settings within the account.

Identity Provider (IdP) Integration

Identity Provider Integration utilizes a Single Sign-On (SSO) user authentication service that permits a user to use one set of enterprise login credentials (e.g., name and password) as a single sign-on to access multiple applications. The system shares existing centralized authentication servers that all other applications and systems use for authentication purposes and combines this with techniques to ensure that users do not have to actively enter their credentials more than once. The benefits of using a single sign-on Identity Provider include:

- · Mitigate risk for access to third-party sites (user passwords not stored or managed externally)
- Reducing password fatigue from different user name and password combinations

- · Reducing time spent re-entering passwords for the same identity
- · Reducing IT costs due to lower number of support cases around failed logins and passwords reset requests
- Streamlining new user on-boarding to the Prysm platform via Auto-provisioning and New User welcome emails
- Ensures that only authorized parties have access to various projects and workspaces within a Prysm Digital Workplace account.

Capabilities:

- Enable the Org Admin to select and configure from a list of supported Identity Access Management or Identity Providers (IAM or IdP).
- Once configured, users will be prompted to login using their 'company issued' login credentials on both Prysm Room solutions and Prysm for web
- Administrators may upload a list of users which will receive an email invitation to self-register for their Prysm user account by signing in through the specified and properly configured Identity Provider.
- Disable any ability for users which leave the organization or no longer require access from logging into Prysm with no manual intervention required by an administrator.
- Existing Prysm user migration can be manual or automatic the next time the user logs in.

Project Permissions

When users create a project they can set project permissions to identify who can access and interact within the project and its workspaces.

Licensing

The activation and enforcement of per-user licensing is fully realized such that customers must purchase a quantity of user and guest licenses sufficient to support the target user population they wish to grant access to the Prysm Application Suite.

UI Customizations

The Prysm Application Suite UI can be customized to reflect the look and feel of a customer's brand. Workspace backgrounds, brand logos and colors can be modified by a software administrator.

Internationalization

Internationalization of the end user interface and keyboard to match worldwide languages is ongoing. Currently, the only localized UI available besides English is Simplified Chinese. An international on-screen keyboard is available in Dutch (Belgium), French, Russian, Espanol (Spain), German (Deutschland) and Chinese (Simplified).

Note: The non-English keyboard utilizes the native Windows 10 keyboard and only one on-screen keyboard is available when a system profile specifies a non-English language.

Online Help Center

Organization Administrators will now be provided access to online help information that allows them to seek and obtain administrative and user help information without leaving the Prysm site.

2.2 Prysm Application Suite Add-on Options

A variety of customizable add-on options are available to integrate the latest and most popular team productivity tools and applications into the Prysm Application Suite. The options described here are only a few of the add-ons that can be enabled as a part of the suite. With each Prysm Application Suite release, additional features and add-on options may be available. For more details on the integration of various third-party applications, refer to the Prysm Online Help Center.

2.2.1 Third-Party File Storage Provider Integration

Support is available for integration of popular third-party file storage providers to the Prysm Application Suite. Refer to the Prysm Online Help Center for more information.

Features

- Project Files interface with an authenticated Microsoft OneDrive for Business, box.com, DropBox or Google Drive list of folders/files
- · Browse and download files stored in the third-party file storage provider host within the workspace
- Access all personal and shared folders in the third-party file storage provider host
- · Import/Export workspace snapshots and/or native files to the third-party file storage provider host directory

Supported Configurations

- · Customers must have an existing Microsoft OneDrive for Business, box.com, DropBox or Google Drive account
- Downloaded content is displayed in the workspace as image files that cannot be edited in the native source file format

2.2.2 Prysm Launch+

Prysm Systems Launch+ is an addon that allows customers to access third party web conferencing and collaboration applications such as Zoom, Cisco WebEx, and Microsoft Teams. Prysm Launch+ adds value via the following capabilities:



Features

- Launch+ provides a launch panel for third party collaboration applications, and it is easy to launch an application with the click of a button.
- With Launch+, now you can use your preferred video conferencing applications such as Zoom, Teams, and WebEx to make calls, share screen, and chat while collaborating in a Prysm for room workspace.
- Once launched, the third-party application windows are always visually on top of the Prysm for room application.
- Third party application windows can be resized and positioned by end users to optimize visual space.
- If an application is closed or minimized, users can simply click the application icon in the Launch+ panel to open or re-focus the app.
- The Launch+ panel can be locked so end users cannot modify the list of available third-party applications.

Supported Configurations

The Launch+ application is supported with all Prysm for room appliances.

2.2.3 Appliance Security and User Authentication

Prysm has enhanced its Application Appliance security and user authentication through the support of several third-party identity providers. Third-party identity providers (IdP/IAM), including ADFS, Azure Active Directory, Google G-Suite, Okta, Ping Identity, and Salesforce, can be configured as the preferred authentication mechanism for Prysm Hosted Cloud product interfaces.

When an IdP is configured, Prysm customers can login using a Single Sign-On (SSO) user authentication service that permits a user to leverage their company issued credentials (e.g., name and password). These systems share existing centralized authentication servers that other applications and systems use for authentication purposes and combines this with techniques to ensure that users do not have to actively enter their credentials more than once. This makes logging in to Prysm easier for users, and it simplifies user management. The benefits of using a single sign-on identity provider include:

- Mitigating the risk of unauthorized access to third-party applications and company content stored therein (user passwords not stored or managed externally)
- Reducing password fatigue from different user name and password combinations across different applications
- · Reducing time spent re-entering passwords across multiple applications
- · Reducing IT costs due to lower number of support cases around failed logins and passwords reset requests
- Streamlining new user on-boarding to the Prysm Application Suite platform via Auto-provisioning and New User welcome emails

In addition to IDP based authentication, Prysm customers may also employ the following additional steps to attach and secure a Prysm appliance as a domain joined device. Customers who are already leveraging Prysm's legacy LDAP-based Active Directory integration should also consider the following recommended changes.

- 1. Create a Service Account with Interactive Login privileges enabled.
- 2. Join the Prysm Application Appliance to the customer domain.
- 3. Configure automatic logon using the Service Account created in Step 1.
- 4. Confirm that the Prysm Application Suite is launched with sufficient access to the underlying file structure.

Wherever Prysm legacy LDAP-based Active Directory integration is already configured, please consult the latest Prysm Application Suite Upgrade Guide for other changes required to take advantage of the latest Identity Provider Integration.

2.2.4 Broadcast Zone

Broadcast zone allows users to select a sub-region of the workspace (as shared content) for output as video conferencing (VC) content to an external codec. Certain models of Video Conferencing (VC) codecs from Cisco and Polycom are supported.

- VC on-screen control panel for use with Cisco C and SX series and Polycom Real Presence codecs
- From the VC control panel, place (dial) and receive calls, perform camera control operations and access device address books
- Share a selected sub-region (not to exceed 1920 x 1080 pixels) of the workspace over the content channel of the VC codec to remote
 destinations

2.2.5 Custom Hardware/Software Integration

Socket APIs are available to facilitate integration with control systems (AMX, Crestron, Extron, etc...), popular video teleconferencing tools and applications. A professional services agreement may be required for some integrations.

Browser Plug-ins

Prysm does not provide an end user interface to install web browser plugins. Any web application that requires a plug-in must be formally requested through Prysm as a special service. Supported web content includes HTML5, VP9 video, Flash and Silverlight.

Remote Desktop Protocol

Microsoft remote desktop protocol (RDP) client software is included to support the display of remote PCs. Users can connect and interact with a remote PC directly from the Prysm Application Suite.

- On screen touch events as well as keyboard/mouse events are transmitted via RDP.
- Only one user can open a file on the remote computer. (File is locked to other users).
- RDP does not support multiple remote connections to the same Windows user desktop account, (cannot login to the same Windows session simultaneously to see the same content).
- · Remote access to the same PC is only possible when the users login through different Windows accounts.
- The remote computer must run RDP server software. (RDP servers are built into Windows operating systems; RDP servers for Unix and OS X are available. Microsoft currently refers to their official RDP server software as Remote Desktop Connection).
- RDP (remote desktop) client windows are not synchronized across endpoints.

3. Prysm for Web

Experience the Prysm Digital Workplace anywhere and anytime through Prysm for web. Prysm for web is Prysm's next generation Prysm Application Suite extension that allows remote team members to join a meeting anywhere and from any device. Through a web browser users can easily join a meeting and interact with content in a Prysm Application Suite workspace from their smart phone, tablet or PC. Ideal for today's enterprise teams that are globally located, Prysm for web ensures engaged participation to increase team productivity.



Features

- Use a standard web browser to join a project and workspace
- A Co-browser can be added by Prysm for web users to a workspace to have full browsing and collaboration capabilities, including acting
 as Presenter and turning Group Participation on and off
- Create and manage projects and workspace settings
- · Upload files directly from a mobile device, tablet or PC
- · Easy drag and drop file upload
- User friendly and fluid workspace navigation for optimal viewing on a small mobile device screen

Supported Configurations

- Prysm for web is available on the Prysm Hosted Cloud with a Prysm Application Appliance deployment option.
- Prysm for web for a Customer Hosted Cloud deployment is only available with Release 2.7 and does not include the above features.
 - The Customer Hosted Cloud environment allows mobile users who are logged into their organizations network with the appropriate credentials to utilize and leverage Prysm for web from varied work locations.
 - For more information on the Customer Hosted Cloud option, refer to the PAS Customer Hosted Cloud Server Installation and Upgrade Guide, 520-00103-00.
- · Most major browsers, operating systems, and devices are supported.

4. Prysm for desktop

Prysm's always-on visual collaboration keeps your team aligned, because every team member works with the same content from any device, anytime and anywhere. And you can extend your Prysm experience with Prysm for desktop, a Windows 10 desktop app that integrates with your existing workflows and applications while providing the speed, reliability, and ease of use that you expect from a desktop application.



Features

- Share applications or your entire desktop with everyone in a Prysm workspace.
- One click to start and stop sharing.
- Multiple people can share at the same time without having to take turns.
- Import files using the familiar "send to" interface from Windows File Explorer.
- Copy items to the clipboard and share them in Prysm workspaces.
- · Add workspace links directly into emails and meeting invitations.

Supported Configurations -

- Prysm for web is available on the Prysm Hosted Cloud with a Prysm Application Appliance deployment option.
- Prysm for desktop for a Customer Hosted Cloud deployment is only available with Release 2.13 and does not include the above features.
 - The Customer Hosted Cloud environment allows mobile users who are logged into their organizations network with the appropriate credentials to utilize and leverage Prysm for web from varied work locations.
 - For more information on the Customer Hosted Cloud option, refer to the PAS Customer Hosted Cloud Server Installation and Upgrade Guide, 520-00103-00.
- · Prysm for desktop requires Windows 10.

5. Prysm Hosted Cloud

The Prysm Cloud enables the real-time, multi-site collaboration features that define Prysm Digital Workplaces. The Prysm Hosted Cloud stores user data/content and unique Prysm Application Suite configuration settings in a secure central location. Prysm Digital Workplaces linked to the same Prysm Hosted Cloud account are able to work in the same Prysm Application Suite project and workspace simultaneously. In addition to the ability to collaborate with remote users, the Prysm Hosted Cloud features user administration and project provisioning controls.

Prysm Hosted Cloud Features

- Real-time and multi-site collaboration in the same project and workspace
 - Up to 25 users can enter the same workspace at the same time
 - · Changes to the workspace by any user at any end point are automatically replicated across all other endpoints
- Share project access with one or multiple users
- Mirror all files and media objects uploaded to the Prysm Hosted Cloud to different endpoint users
 - Requires a minimal real-time data transfer bandwidth of 1.5 Mbps
 - The total number of in-room live source devices that may be available to share can be up to (16) devices within each workspace. As of this release however, you can only share up to two (2) of these devices (wireless or wired) at a time.
- Configure the Prysm Application Suite features and settings through the Software Administration web portal (Web Admin)
 - User provisioning and access levels (IT Administrator, general user, etc...)
 - Create and manage projects, workspaces and upload content from third-party file storage providers including Microsoft OneDrive for Business, Box.com, DropBox and Google Drive.
 - · Configure user interface backgrounds, colors and layout (snap grids)
 - Enable and configure upgrade option settings
 - · Prevent a user outside an account from viewing projects or the associated files within those projects
 - Control project security/visibility and other critical application permissions by restricting permissions

5.1 Prysm Cloud Physical Environments

The Prysm Application Suite is available in two main server deployment options that connect the user to any endpoint display or device.

Server Deployment Options

Prysm Hosted Cloud – Multi-Tenant Cloud deployment

Note: The Prysm Hosted Cloud environment allows users to access all of the latest available Prysm Application Suite platform, features and enhancements

 Customer Hosted Cloud – Customer provisioned, hosted and maintained on-premises server with Prysm supplied Virtual Machine (VM) server software deployment

Endpoint Display or Device Options

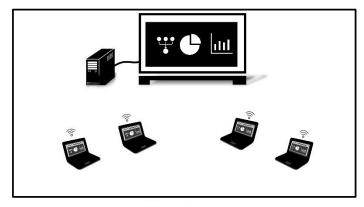
- LPD and LCD displays with an in-room Prysm Application Appliance
- Desktop computer stations, laptops, tablets and smart-phones

5.1.1 Prysm Hosted Cloud

The Prysm Hosted Cloud is a highly secure multi-tenant environment in which all the Administrative, API and Content delivery services are hosted. These core services enable the continuous delivery of the latest features and capabilities upon which the Prysm Application Suite is built. For the latest features, refer to the *Prysm Launch Notification and Feature Summary, 551-00121-00* document.

5.1.2 Customer Hosted Cloud

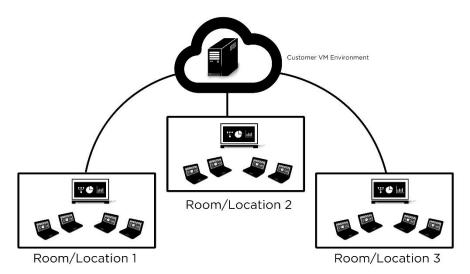
The Customer Hosted Cloud is an on-premise collaboration solution that is deployed in a customer-secured environment. The Customer Hosted Cloud has unique hardware requirements and is available as either a single or multi-room solution.



Single Room

Single Room "All-In-One" Solution

The Prysm single room solution is intended for a single display and a small team of collaborators. This solution provides an "All-In-One" appliance that runs both the cloud server and front-end client software. The room client will run on the display while local individuals can interact via Prysm for web.



Multi Room Solution

The Prysm multi room solution is intended for company-wide use, multiple rooms and web access for all employees. This solution provides Virtual Machine (VM) server software which resides entirely within the customer hosted environment. The customer must have and maintain the VM host infrastructure upon which the Prysm Application Services VM server software is deployed.

The Customer Hosted Cloud solution provides many of the capabilities of the Prysm Hosted Cloud, but it may contain limited features by comparison to the Prysm Hosted Cloud.

6. Prysm Displays

Prysm Digital Workplace solutions work best with large sized displays that can create experiences with impact. Transform your working environment with the Prysm Systems LPD 6K Series Displays, powered by the Prysm Application Suite and Prysm Systems' patented laser phosphor display (LPD) technology.

The Prysm Systems LPD 6K is an interactive large-format display that offers a panoramic image uninterrupted by seams or bezels. The single-panel display combines vivid colors presented in high resolution with a rich, deep contrast to deliver stunning picture quality. Our LPD 6K is an extremely energy-efficient interactive touch display, using less energy than a hair dryer. The flexible, impact-resistant top surface is specially formulated to offer smooth touch interaction and can be viewed at any distance, up close or far away, and at any angle without the eye fatigue typical of other display technologies. Should it ever be required, all components in the LPD 6K can be serviced from the front, ensuring maximum up-time.

This large-format display comes bundled with the Prysm Application Suite, a digital workplace platform that brings people, content, and ideas together to create a smart and efficient collaboration environment. The platform displays streaming video, web applications, documents, presentations, and images as well as input from laptops and mobile devices with a simple tap.

Key Features include:

- Brilliant luminance up close and far away with a 90% fill factor
- A no-bezel, no-seam picture with a rollable front panel that can fit into virtually any room, even one with a standard door
- Flexibility to suit a variety of use cases, from at-the-screen collaboration with touch interactivity to digital signage, for viewing at a distance
- · Superior energy efficiency compared to other displays, so operating budgets don't have to be drained

Prysm Systems LPD 6K Series lets teams work the way they've always wanted to work, on a large digital canvas. It will improve how you showcase your brand, collaborate, and present to an audience.

For smaller sized rooms we also offer Prysm Systems' 85" LCD panels, that can be configured as a single or dual 85" screen configuration.

6.2 LPD 6K Series Digital Workplace for 100" + diagonal screen sizes

The Prysm Systems LPD 6K 225 (225" diagonal), Prysm Systems LPD 6K 190 (190" diagonal), and Prysm Systems LPD 6K 135 (135" diagonal), Digital Workplaces are powered by Prysm Systems' patented laser phosphor display (LPD) technology. Ideal for large conference rooms, lobbies and board rooms, Prysm Systems' LPD 6K technology creates a seamless, engaging and immersive viewing experience. Prysm Systems LPD Digital Workplaces provide crisp, blur-free images with wide viewing angles on a sustainable, low carbon footprint compared to other large scale displays on the market today.



Prysm Systems LPD 6K Digital Workplace	Prysm Systems LPD 6K 225	Prysm Systems LPD 6K 190	Prysm Systems LPD 6K 135
	SUSTAINABLY SMART	SUSTAINABLY SMART PREVISION	PRYSM
Resolution (w x h)	6,684 x 1872 pixels	5616 × 1872	3744 x 1872
Display Active Area Dimensions	216 in x 59 in x 224 in 5491 mm x 1489 mm x 5689 mm	177 in x 59 in x 186 in 4493 mm x 1490 mm x 4734 mm	118 in x 59 in x 132 in 2995 mm x 1490 mm x 3345 mm
Overall Dimensions (W × H × Depth)	230 in × 98.0 in × 30.8 in 5833 mm × 2488 mm × 753 mm	190.3 in × 98.0 in × 30.8 in 4834 mm × 2488 mm × 753 mm	131.4 in × 98.0 in × 30.8 in 3337 mm × 2488 mm × 782 mm
Viewing Angle	178°	178°	178°
Pixels	12.9 million	10.5 million	7 million
Power Consumption (display only)	Avg. 1,620 W	Avg. 1,300 W	Avg. 900 W

References

Description (Product ID)	Product PN	Specification Sheet PN
Prysm Systems LPD 6K, 225 (7K)	038-00018-11	552-00113-00
Prysm Systems LPD 6K Series II, 190 (6K)	038-00018-09	552-00094-00
Prysm Systems LPD 6K Series II, 135 (4K)	038-00018-06	552-00092-00

6.3 LCD Digital Workplace



The Prysm Systems 85 (85" diagonal) and Prysm Systems 85 Dual (two 85" LCDs), LCD Digital Workplaces are ideal for smaller sized conference or team rooms. They provide a compact footprint with a modern stand and integrated (rear) appliance rack.

Prysm Systems LCD Digital Workplace	Prysm 85	Prysm 85 Dual
Resolution (W x H)	3840 × 2160, UHD	3840 × 2160, UHD
Backlight Illumination	Direct LED	Direct LED
LCD Dimensions (W x H x D)	75.8 × 43.6 × 4.7 in 1,926 × 1,108 × 119 mm	75.8 × 43.6 × 4.7 in 1,926 × 1,108 × 119 mm (each display) *Two 85s is ~155 in or 3,937 mm diagonal
Stand Height	76.6 in, 1,946 mm	76.6 in, 1,946 mm
LCD Weight	234.4 lbs, 106.3 kg	234.4 lbs, 106.3 kg (each display)
LCD Power Consumption	Typical: 450 W	Typical: 450 W (each display)
Cover Glass	Corning® Gorilla® Chemically strengthened, 2mm	
Audio	Two rear facing speakers, 10 W each	

References

Product (Product ID)	Product PN
Prysm 85 Visual Workplace Solution (PR-LCDAG-85)	038-00025-10
Prysm 85 Dual Visual Workplace Solution (PR-LCDAG-85D)	038-00030-01

7. Prysm Application Appliance Specifications

The Prysm Application Appliance is the computer that runs the Prysm Application Suite. Each Prysm Digital Workplace has a dedicated Application Appliance that is carefully specified to properly integrate with the Prysm Digital Workplace and Prysm Application Suite features. Depending on the needs of the user and size of the display, the specific Application Appliance unit, port types and quantity of video capture cards for the Prysm Digital Workplace may vary.

Additionally, the Prysm Systems Application Appliance, can be utilized to configure non-Prysm Systems (alternative) touch interactive LCD displays to deliver the Digital Workplace solution for smaller sized rooms requiring less than 100" diagonal displays. See Technical Bulletin Integrating Alternative LCDs with the Prysm Systems Application Appliance (551-00116-00) for more details.

Software:

- Prysm Application Suite
- OS: Windows 10, 64-bit

Hardware

- Prysm Application Appliance Chassis Three models are available depending on the Prysm Digital Workplace selected and customer requirements.
- Audio:
 - Output Audio is output via a 3.5 mm analog TRS output on the Prysm Application Appliance and is configured via the standard Microsoft Windows audio drivers.
 - Input Embedded audio from digital video input may be output via the Prysm Application Appliance and controlled (mute/unmute) via on-screen controls.

Application Appliance Specifications

Models>	X-15 Appliance	X-30 Appliance	X-40 Appliance
Video Output GPU type	NVIDIA® Quadro P620 2GB 4x MiniDP outputs	NVIDIA® Quadro® P1000, 4x MiniDP outputs	NVIDIA® Quadro® P2200
Video Capture, Input	N/A	4x HDMI 1.4	Up to 8x HDMI 1.4
Processor(s)	Intel® Core I7-8700T, 2.4 GHz	Intel® Xeon E3 1270	Intel® Xeon W-2104
RAM	32GB	32GB	32GB
Storage	256 GB SSD	256 GB SSD	256 GB SSD
Dimensions (W × H × D)	1.437 in × 7.047 in × 7.201 in 36.5 mm × 179.0 mm × 182.90 mm	8.5 in × 2.28 in × 8.50 in 215.9 mm × 58 mm × 215.9 mm	6.65 in × 15.20 in × 17.52 in 169 mm × 386 mm × 445 mm
Weight	3.08 lbs / 1.4 kg	16.0 lbs / 7.2 kg	24.9 lbs, 11.3 kg

Prysm Application Appliance card types, GPU quantity, input/capture card quantity, etc. will vary depending on customer requirements for the Prysm Systems LPD6K and LCD Digital Workplaces, based on customizations requested. All standard configurations utilize the X-30 or X-15 application appliances.

- Broadcast requirement will affect GPU quantity.
- To enable videoconferencing (VC) codec/hardware with Broadcast Zone, a dedicated GPU port is required. External Sync requires the NVIDIA Quadro Sync card.
- IIC requires a NIC card.

Network Bandwidth

Full-time Internet connectivity is required to enable data and file synchronization between the collaboration end points and either the Prysm Hosted Cloud or Customer Hosted Cloud.

- Internet Bandwidth: Minimum of 1.5 Mbps
- · LAN Connection: Minimum of 100 Mbps
- · IP Address: Must be assigned to each appliance as static or via DHCP