

Deploy a Pod Quickstart Guide

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Introduction //

The Solstice Pod connects to a meeting room display and leverages existing WiFi/Ethernet networks to facilitate wireless content sharing and collaboration. This document provides technology managers with instructions for quickly deploying a single Pod.

Initial Rollout Considerations //

For your initial rollout, we recommend attaching your Pods to your existing WiFi/Ethernet networks for improved performance, security, user workflows, and to give users access to the internet while using Solstice. In this guide, we'll cover this and other important rollout considerations.

There are 5 core considerations for any Solstice deployment:

- How will the Pods be attached to your network(s)?
- How will users discover, connect, and share content to the Pods?
- How should the Pods be configured, functionally and visually?
- How should the Pods be configured from a security standpoint?
- What is the long-term management plan?

By following the steps in this guide, we'll address the options for each of these considerations. However, it's also important to think through each rollout consideration within the context of your organization and involve the appropriate stakeholders, such as the IT department for attaching Pods to your host networks, each step along the way.

Deploy a Pod //

Step 1: Unbox and Set Up the Pod //

1. Remove the Pod from the box.
2. Connect the Pod to your display using an HDMI cable.
3. Power on your Pod using one of the following methods:
 - **Gen2i Pods:** Plug the Pod into a power outlet using a Mersive-provided power supply.
 - **Gen3 Pods:** If your Ethernet network is PoE+ enabled, you can power your Pod using that Ethernet connection. If your network is not PoE+ enabled, you can power your Gen3 Pod using a Mersive-provided power supply.

Pod Installation Guidelines //

Because the Pod does not store user credential information, unencrypted passwords, or users' data that has been shared to the display, the physical Pods do not have to be located in secure locations. However, other considerations related to theft and environmental conditions should be considered.

- Select an appropriate physical mounting solution for the Pod that cannot be detached. Consider the use of mounting locks and/or hidden VESA mounting systems behind the display. Specific mounting orientation is not an important factor as the Pod is operational in any orientation.

- Ensure that appropriate environmental controls have been taken into account. The device should operate within an ambient temperature range of 0° C (32° F) to 35° C (95° F). This may require ventilation or active airflow. Solstice Pods should never be stacked on top of each other.
- The Pod should not be mounted in direct contact with a surface that exceeds 30° C (86° F).

Step 2: Access the Pod’s Local Configuration Panel //

There are a few methods to access your Pod’s configuration settings. Every Solstice Pod can be configured via the individual Pod’s configuration panel. This method will require you to configure every Pod individually. Note that the browser configuration can be either password-protected or disabled entirely once you are done with your initial configuration.

The Pod’s configuration panel can be accessed either by:

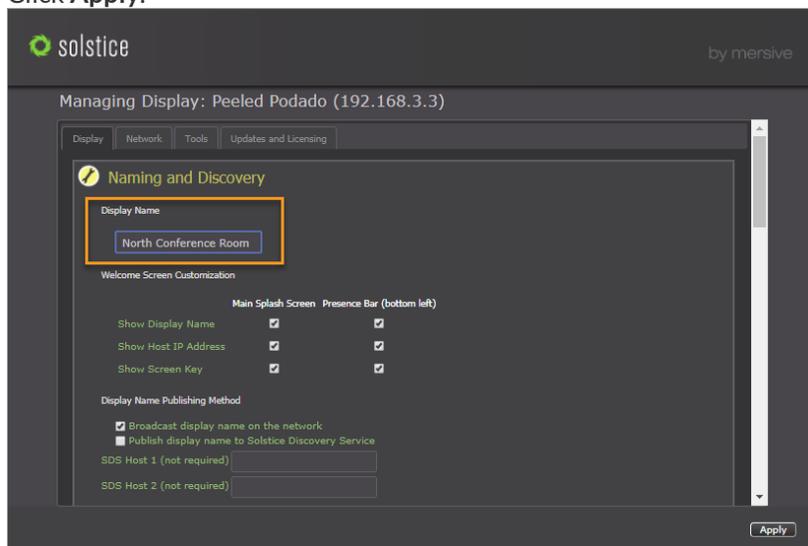
- Connecting a USB mouse and keyboard to the Pod, or it can be accessed via web browser from a separate device.
- By entering the Pod’s IP address into a web browser, then clicking the Settings icon  in the lower right-hand corner of the quick connect page.

Did you know? The Solstice Dashboard allows technology managers to centrally monitor, configure, and update all Enterprise Edition Solstice hosts on their network. Learn more about Enterprise Edition licensing here. If you have purchased Enterprise Edition licenses and want more information about how to use the Dashboard for one-to-many management, check out the [Dashboard Admin Guide](#).

Step 3: Name the Pod //

All Pods are shipped with the default name of “SolsticePod”, so we recommend changing the name for identification purposes. Pods should be named based on the location they will be deployed in, e.g. “Conference Room 201” or “Dave’s Office”.

1. First access the local configuration panel by attaching a USB mouse and keyboard to the Pod and clicking the Solstice  icon in the lower right-hand corner of the Solstice display interface.
2. Select **System > Configure**. The configuration panel will appear.
3. Go to the **Display** tab and change the **Display Name** to a descriptive name for your Pod.
4. Click **Apply**.



Step 4: Attach the Pod to your Existing Network(s) //

The Solstice Pod is designed to attach to existing WiFi/Ethernet networks that users can access to connect and share content to the Pod. The Pod hardware includes two distinct network interface cards (one Ethernet and one wireless card) to provide various options for network connection.

Option 1: Attach via Ethernet (Recommended) //

The recommended deployment method is to attach the Pod to the primary user network via Ethernet.

1. Plug a network-connected Ethernet cable into the Ethernet port on the back of the Pod(s).
2. Go to the **Network** tab of the Pod's local configuration panel and ensure **Ethernet** is enabled.
3. Select either **DHCP** for the Pod to be dynamically assigned an IP address, or select **Static IP** to enter your network configuration manually.
4. Click **Apply**.

Option 2: Attach Wirelessly //

Alternatively, the Pod can be either be attached to the primary network wirelessly if an Ethernet connection is not available in the deployment space.

1. Go to the **Network** tab.
2. Enable Wireless Settings.
3. Select Attached to Existing Network radio button.
4. Hit **Apply** to populate a list of networks. The list may take a few seconds to populate.
5. Click on the drop-down and select a wireless network.
6. If you are unable to find the network you want to connect to:
7. Click Add Wireless Network.
8. Enter in the name of the network in the **SSID** field.
9. Select the type of network from the radio buttons listed below it.
10. Click **Ok**.
11. In the **Password** field, enter the network password.
12. Select either **DHCP** for the Pod to be dynamically assigned an IP address, or select **Static IP** to enter your network configuration manually.
13. Click **Apply**.

Option 3: Dual-Networks (Attached both via Ethernet and Wirelessly) //

Many deployments take advantage of the Pod's dual-network capabilities to support secure collaboration between users on separate networks, such as corporate and guest users. The Pod's two network interface cards are completely distinct with separate routing tables, enabling seamless collaboration without compromising the security of either network. Mersive recommends attaching the Pod to the primary network via Ethernet and connect to the secondary/guest network wirelessly (follow the steps for both [Option 1](#) and [Option 2](#)).

Option 4: Wireless Access Point Mode (Not Recommended) //

While the Pod's Wireless Access Point (WAP) mode is great for evaluating Solstice's collaboration features, it is not recommended for permanent deployments due to performance limitations and potential security risks. The Pod will come with WAP mode enabled by default. Mersive recommends disabling WAP mode by either disabling the wireless settings or attaching the Pod to an existing wireless network instead.

Additional Network Configurations //

For more detailed information about the Pod's network options and to learn about other important network factors such as opening the necessary network ports and enabling additional sharing options such as iOS mirroring and Miracast, please refer to our [Network Deployment Guide](#).

Did you know? The wireless card in a Gen2i or Gen3 Solstice Pod may use 2.4GHz or 5GHz channels to seamlessly integrate with your existing network.

Step 5: Set the Pod's Date and Time //

1. Open the Pod's local configuration panel.
2. Go to the **Display** tab > **System** section.
3. To set the date and time using a time server:
 - a. Enable the Automatically set time and date based off internet time server option.
 - b. In the **Time Server** field, enter the time server URL.
 - c. From the **Timezone** drop-down, select the timezone the Pod is in.
 - d. Click **Apply**.
4. To set the date and time manually:
 - a. Disable the setting to Automatically set time and date based off internet time server. A pop-up will appear.
 - b. Click Ignore, Keep Manual Time Setting.
 - c. From the **Timezone** drop-down, select the timezone the Pod is in.
 - d. Click in the **Date** field and enter today's date or select it from the calendar that displays.
 - e. In the **Time** field, select the current time.
 - f. Click **Apply**.

Step 6: Make Pods Available for Connection with Discovery //

Solstice is designed to make it easy and intuitive for users to connect to a Solstice Pod. A user may always connect to a Pod by typing the Pod's IP address into a browser window or the Solstice app. However, Solstice "discovery" can streamline the connection process by listing all Pods available for connection and enabling users to simply click a Pod's name to connect. There are three discovery methods that will enable this click-to-connect functionality in your Solstice deployment:

Option 1: Broadcast Discovery (default) //

By default, each Pod will broadcast its name and IP address on the host network via UDP broadcast packets. While this usually works great for smaller organizations with simple network configurations, UDP broadcast traffic is often not allowed on larger, IT-managed networks. Broadcast discovery can be disabled in the Pod's configuration panel under the **Network** tab.

Option 2: Solstice Discovery Service (SDS) Application (recommended) //

SDS is a light-weight Windows application created for networks that do not allow UDP broadcast packets. Basic SDS use requires an administrator to associate each Pod with the SDS host's IP address. Users' SDS host will be set automatically when they download the Solstice app directly from a Pod, or users can enter the SDS host IP address in the Settings menu of their Solstice apps (General tab > Solstice Discovery Service Address field).

Did you know? SDS is a simple but important component of Solstice deployments on host networks that do not allow UDP broadcast/multicast traffic. It provides the display list and other information about which displays are in use (or even scheduled) so that the app discovery screen is useful and easy to use.

Option 3: Universal SDS Override with DNS Entry //

With this option, users will not be required to enter the SDS host IP address in order to leverage the non-broadcast discovery that SDS provides. For this to work, an administrator **must** add an SDS DNS entry on the local network. For more information on adding an SDS DNS entry, refer to the [SDS Guide](#).

For more information on discovery options see the [Network Deployment Guide](#), or jump straight to the [SDS Guide](#).

Step 7: Configure How Users will be able to Share Content to the Display //



If enabling sharing via Miracast, see [How to Deploy Miracast](#) for more information on how configure other options to get Miracast working.



The option to **Enable AirPlay Discovery Proxy** allows mirroring of iOS devices on networks that do not allow UDP broadcast/multicast traffic or Apple's Bonjour protocol, but does not support video sharing on all networks. Refer to the [Network Deployment Guide](#) for more information.

Disabling any given client sharing option means the users in the room will not see that specific sharing option for the displays the option is disabled for.

1. Go to the **Display** tab.
2. Under the **Resource Restriction** section, enable or disable the various resource sharing options:
 - Desktop Screen Sharing
 - Application Window Sharing
 - Miracast
 - Android Mirroring
 - iOS Mirroring
 - Video Files and Images
3. Click **Apply**.

Step 8: Configure Basic Security Features //

Enable Screen Key //

Screen key only allows those who can see the screen key on the Solstice display to connect to the session by requiring them to enter the alphanumeric screen key into their Solstice App before connecting.

1. Go to the **Display** tab.
2. Under Access Control, select **Enable screen key**.
3. Click **Apply**.

Set an Admin Password to Protect Configurations //

1. Go to the **Display** tab.
2. In the **System** section, enter an **Admin Password**.



Ensure you write down and store the admin password you configure. Mersive strongly recommends using the same admin password for all Pods across your deployment. Losing your admin password will prevent you from making any configuration changes to the Pod.

3. Click **Apply**.

For more information on additional security configurations, see our [Baseline Security Standard Guide](#).

Step 9: Understand and Validate Baseline Network Performance //

Solstice has been optimized for high performance across a broad range of network conditions, but administrators should be aware that, as a live video streaming solution, Solstice's performance is dependent on the host network. Therefore, the network should meet the minimum requirements outlined below. These statistics are measured between a Solstice host and end user device for two common use cases.

Expected Use Case	Min. Bandwidth Available	Maximum Packet Latency	Maximum Network Jitter	Maximum Packet Loss
Business Application Sharing (PowerPoint/Documents)	0.75 MB * Number of Simultaneously Connected Devices	175ms	1.2 Standard Deviations	1.25%
1080p Full HD Video Sharing from Desktop	1.1 MB * Number of Simultaneously Connected Devices	35ms	1 Standard Deviation	0.20%

How to Quickly Test Solstice's Performance on Your Network //



The laptop you use should be representative of those that will be used in production. Solstice requirements of user devices are not intensive by modern standards. However, very old devices with underpowered graphics processing capabilities may exhibit poor performance when live streaming to Solstice displays.

1. Connect to the Pod from a laptop and share the desktop (desktop audio sharing is toggled on by default).

2. Next, navigate to YouTube and choose a video to play via the web browser. You should experience a smooth viewing experience with synchronous audio. If the video playback is not smooth or audio is choppy or not synchronized, you may have a network performance issue.

To fully evaluate the performance of Solstice on your network, perform the [validation steps](#) in the Network Deployment Guide while monitoring your network with your preferred tools.

Large-Scale Deployment Considerations //

When Solstice is deployed at scale, there are additional considerations for administrators. As a first step to prepare for a large deployment, we encourage you to [schedule your deployment](#) with Mersive so that we can stage resources to support the on-site deployment team.

In addition, please review the major deployment considerations, which are covered at length in the [Network Deployment Guide](#). These include:

- Host Network Considerations
- Network Deployment and Configuration
- Required Open Network Ports
- Setting Up Display Discovery

Long-Term Deployment Management //

Solstice is designed as an every-room solution, and large deployments may involve dozens or even hundreds of Pods, so ongoing, long-term management is important. In this section, we'll cover the tools and resources available to support long-term deployments.

The Solstice Dashboard //

The Solstice Dashboard is an invaluable tool for monitoring and managing large deployments. We recommend the technology managers responsible for the Solstice deployment use the Solstice Dashboard as their primary tool for ongoing management and maintenance of the deployment. This may be the IT team, the AV room-owner, or a third party such as the AV integrator.



In order to be managed in the Dashboard, the Pods must have [Enterprise Edition](#) licenses.

[Download the Solstice Dashboard >>](#)

[View the Solstice Dashboard guide >>](#)

Solstice Discovery Service (SDS) //

Solstice Discovery Service (SDS) is an important component for long-term deployments on managed IT networks. In addition to facilitating the user connection process, SDS is also required for several enterprise features including [Solstice Multi-Room](#).

[Download SDS >>](#)

[View the SDS Guide >>](#)

Solstice Kepler //

Solstice Kepler is a cloud-based room monitoring solution which will provide alerts, real-time deployment status, usage data, and other valuable analytics. Kepler will be an add-on service for Solstice enterprise deployments.

[View the Kepler Quickstart Guide >>](#)

Solstice OpenControl API //

The Solstice OpenControl API exposes much of the management and control functionality found in the Solstice Dashboard for integration with third-party systems such as room control panels and other workplace technologies/systems.

[View the OpenControl API guide >>](#)