

Solstice Cloud Admin Guide

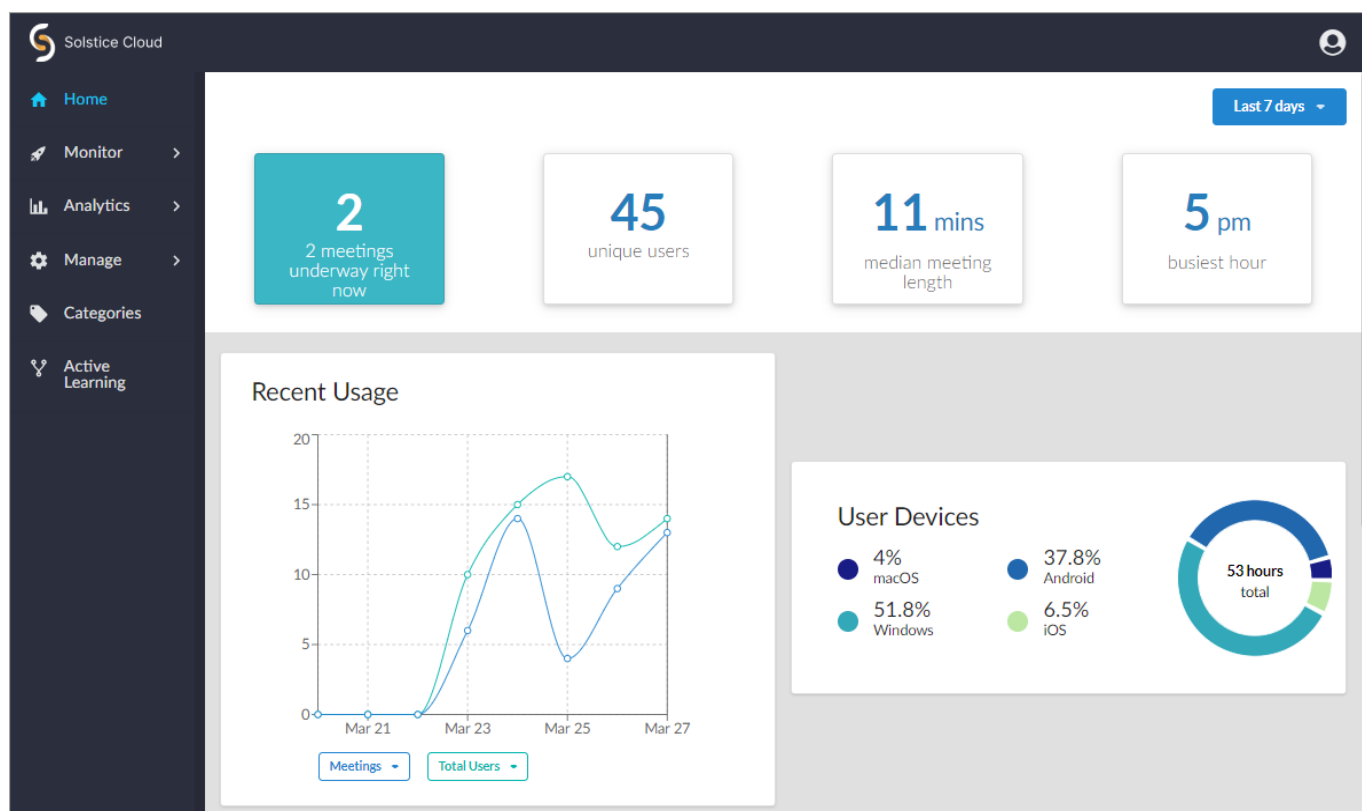
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Get Started with Solstice Cloud

Solstice Cloud is a secure and scalable portal that helps organizations to optimize their Solstice-enabled meeting and learning spaces for greater usability, productivity, and return on investment. This is done through its easy-to-use management, monitoring, and analytics capabilities. Solstice Cloud allows administrators to easily deploy, monitor, and update Solstice Pods from anywhere in the world using custom categories, configuration templates, and scheduled software updates. Once deployed, usage data is securely collected from Solstice Pods and can be compared across room type or location to provide insight into room usage, participation, and meeting or class duration.



Your organization can start using Solstice Cloud at any time by quickly onboarding your Solstice Pods into the Solstice Cloud management portal from the Solstice Dashboard app. The first time you onboard Pods into Solstice Cloud from Solstice Dashboard, you will be prompted to create a Solstice Cloud account, which will be your organization's master account for Solstice Cloud management.

Only a single master Solstice Cloud account is needed per organization, and it is strongly recommended you import all your organization's Solstice Pods into Solstice Cloud using this account. You can also use your master Solstice Cloud account to invite other users to join Solstice Cloud management for your organization in a variety of user roles. Inviting any additional users from the master account allows those users to access the same set of Pods and data for your organization. For more information, see [Roles and Permissions](#).

Requirements

- To onboard Pods into Solstice Cloud, Pods must have internet access and be running Solstice version 3.4 or later.
- Deployment management capabilities are available for every Solstice Pod on version 4.5 or later.
- Standard Solstice Cloud capabilities, including deployment management, are available at no charge for every Pod in perpetuity.
- Full Solstice Cloud capabilities, including deployment monitoring and analytics, require current Solstice Subscription.

How To

Create Your Solstice Cloud Account and Onboard Your Pods

1. Open Solstice Dashboard.



If you do not have the Solstice Dashboard app, you will first need to download Dashboard, then import your Pods into Dashboard before proceeding to step 2. [Learn more.](#)

2. From the list of Your Solstice Instances, select the Solstice Pod displays you wish to manage in Solstice Cloud.



Only Solstice displays running on Solstice Pod hardware can be added to and managed in Solstice Cloud. Use Solstice Dashboard to manage any instances of the Solstice Windows Display Software in use at your organization.

3. Go to the **Solstice Cloud** tab, then click **Connect**. A list of your selected Pod displays will appear.
4. If needed, you can remove or select additional Pod displays. When the list of Pods to be imported into Solstice Cloud is complete, click **Next**.
5. Read through the terms of service. If you agree to the terms listed, select the **Agree** checkbox, then click **Next**.
6. Enter your email address, then click **Next**. If no Solstice Cloud account is associated with the email address entered, you will be prompted to choose a password for your new Solstice Cloud.
7. Enter and confirm your new password, then click **Next**. You will see a notification confirming the addition of the selected Solstice Pod displays to your Solstice Cloud account.

8. Click anywhere on the notification to proceed.
 9. Click **My Account** to be directed to the [Solstice Cloud login page](#) in your default web browser.
-

Create Categories and Assign Pods

Categories provide the ability to classify individual Solstice Pods, and the collaboration spaces they create, in your Solstice deployment in ways that are meaningful to you. Mersive strongly recommends assigning Pods to categories once you have imported them into the Solstice Cloud management portal. Once created, categories can be used to filter, sort, and compare usage data among different Solstice instances to help drive business decisions. For example, data from Solstice Cloud's meeting analytics can help you determine future meeting room construction based on the most utilized types of rooms. Categories can also be used to schedule software updates for Pods selected by location or department, allowing you to choose the best update times for that group.

Solstice Cloud allows you to automatically categorize Pods by location and create your own custom categories. Creating a robust category scheme enables you to drill down into your deployment usage data in meaningful ways. For example, you can compare Solstice usage between buildings to see how the technology is being adopted at each location or compare the average meeting duration of bookable versus non-bookable huddle spaces.

Mersive recommends that you follow these guidelines when assigning categories.

- Create categories that can be applied to all Pods (e.g., create a "City" category instead of a "Denver" category).
- Start with broad categories then drill down into more specific ones (e.g., create a category for Country, City, Building, then Department or Floor).

Here is an example location category scheme:

Automatic			Custom		
Country	City	Building	Department	Room Type	Bookable
US	Denver	Denver HQ	Marketing	Conference	Yes
US	New York	NY Office	Sales	Huddle	No
Italy	Milan	Corso Vittorio	Product	Office	
UK	London	141 Sussex Gardens	Engineering	Public Area	
Beijing	China	Jiang Jun Si Lu	Chemistry		

How To

Add a New Category

1. In the left sidebar of Solstice Cloud, select **Categories**.
2. Click **Add Category**.

3. To create a category from one of the recommended options:

- a. Click **Choose from recommended**. Options are Room Type (huddle, conference, etc.), Display Type (flat panel, 4K, etc.) or Interaction (mouse, touch, etc.). Each pre-configured type can be used once.
- b. Select one of the recommended categories, then click **Next**. A note about managing the new category may appear; click **Got It** to proceed to category configuration.
- c. Click **Add new** at the top of the options table to add more options. Click the trashcan icon beside any existing options in the table that you do not wish to keep.



Options within a category should always be mutually exclusive since only one option can be selected for each Pod. Avoid creating overlapping options that could be simultaneously true of a single Pod.

- d. Click **Done**. The added category now appears in the Category Manager table.
- e. Click **Back** to return to the category overview charts.

4. To create your own custom category:

- a. If given the choice, Click **Create custom**. If all of the pre-configured recommended categories have already been added, you will go straight to entering the Category Name in the next step.
- b. Enter the **Category Name**, then click **Next**.
- c. Enter in the **Options**. For example, if you are creating a category to group Pods based on the floor of the building they are on, you can enter Level 1, Level 2, etc.



Options within a category should always be mutually exclusive since only one option can be selected for each Pod. Avoid creating overlapping options that could be simultaneously true of a single Pod.

- d. If you wish you add another option, click in the last option field and hit the **Enter** key.
- e. Once you are done entering options, click **Save & Apply**.
- f. A note about managing the new category appears; click **Got it**. The added category will appear in the Category Manager table.
- g. Click **Done** and **Back** to return to the category overview charts.

Assign Pods to Category Options



As much as possible, choose the best category for each Pod from the beginning, as



changing the assigned category of a Pod can affect the accuracy of historical data.


1. In the left sidebar of Solstice Cloud, select **Categories**. Any Solstice Pods that have been imported into Solstice Cloud for your organization will appear in the Category Manager table.
2. To select which previously added categories display in the Category Manager table, click the expand ▼ icon next to Manage Columns.
3. Check the boxes for categories you wish to view. The selected categories will appear as columns in the table.
4. To add an individual Solstice Pod to a category:
 - a. In the row for the desired Pod, click the down arrow in the corresponding category column and select an option from the list that appears. Each Pod can be assigned to only one option per category.
5. To add Solstice Pods to categories in batches:
 - a. Check the box to the left of the Name for each Pod to be assigned to the same category option. Check the box at the top of this column to select all the Pods in the table.







Start typing in the Search box at the top of the table to filter for Pods with names that contain the matching letters or words.

- b. In the row for any of the selected Pods, choose the desired option from the desired category column.
 - c. Click **Save** to confirm you want to assign the category option for the number of Pod displays you selected and return to the Category Manager table.
6. Repeat steps 3–5 to assign groups of Pods to other category options.

Manage a Category

1. In the left sidebar of Solstice Cloud, select **Categories**. Any Solstice Pods that have been imported into Solstice Cloud for your organization will appear in the Category Manager table.
 2. At the top of the screen, click the left < and right > icons to find the desired category, then click anywhere on the pie chart to view details of that category.
 3. Click the pencil icon  above the category options to access tools to edit the options, change the category name, or delete the category.
-

4. To change the name of the selected category:
 - a. Click the category name and select **Rename Category**.
 - b. Click **Done** when finished making changes to view the updates to the selected category.
 - c. Click **Back** to return to the full list of categories and overview charts.
 5. To add a category option:
 - a. Click **Add new...** in the top row of the options table.
 - b. Enter the name of the new category option and click the check icon  to save the new category option. Click the gray X icon  to cancel the addition of the new category option.
 - c. Click **Done** when finished.
 - d. Click **Back** to return to the full list of categories.
 6. To edit the name of an existing option:
 - a. Click the existing option name in the table.
 - b. Make your desired changes to the name and click the check icon  to save the new name. Click the gray X icon  to cancel any changes and keep the existing option name.
 - c. Click **Done** when finished to view the updates to the selected category.
 - d. Click **Back** to return to the full list of categories.
 7. To delete the selected category:
 - a. Click the category name and select **Delete Category**.
 - b. Click **Yes - Delete** to confirm deletion and return to the full list of categories.
-

Managing Your Solstice Pod Settings

Solstice Cloud allows you to manage your Solstice Pods remotely from anywhere. Solstice Cloud administrators can either apply settings to individual Pods, or use Solstice Cloud templates to easily apply configurations to multiple Pods across your deployment. Templates can be created for network settings, security settings, appearance settings, and more, and provide access to all of the configuration options available in the Solstice Dashboard. Solstice Cloud templates can be applied to Pods managed by Solstice version 4.5 or later.

While most settings can be batch configured in templates, there are still certain settings or values that are unique to each Pod and will need to be set for each Pod individually, such as static IP addresses or DNS hostnames. When creating templates, these settings will be labeled with "Unique to Pod" if they need to be configured individually.

Example

IP Address	Gateway *	Network Prefix Length *
<input type="text" value="Unique To Pod"/>	<input type="text"/>	<input type="text" value="24"/>
DNS 1 *	DNS 2	
<input type="text"/>	<input type="text"/>	



To make the process of applying templates across your deployment more efficient, the [Create Categories](#) topic outlines how to create and use categories, as well as best practices to consider when creating categories. This will allow you to apply configuration templates to Pods by location, room type, or any other categories you choose to define.

How To

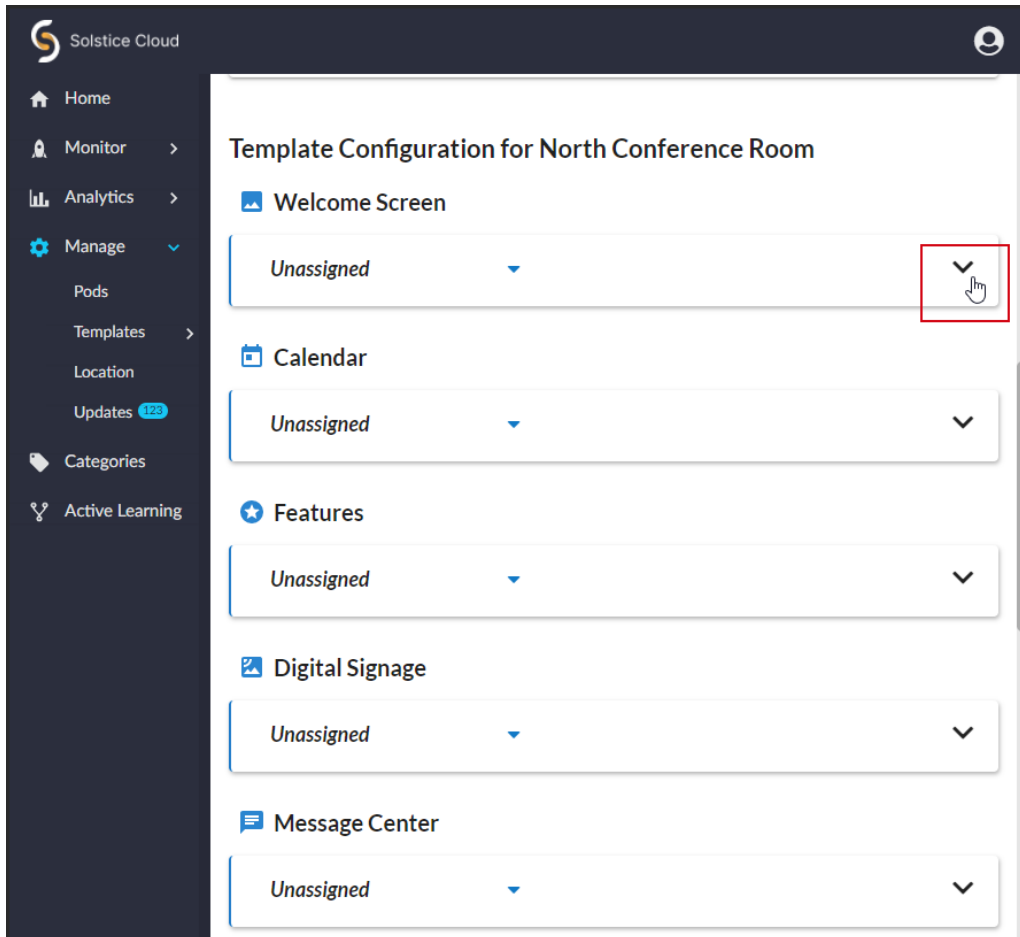
Apply Settings to Individual Pods

There are two ways to assign settings to an individual Pod:

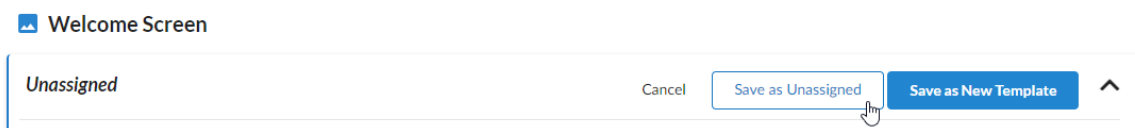
- Leave the Pod unassigned, and modify the specific settings for the Pod
- Create a template and then assign the template to the Pod (see [Create a New Template](#)).

To apply settings to a specific Pod without assigning a template:

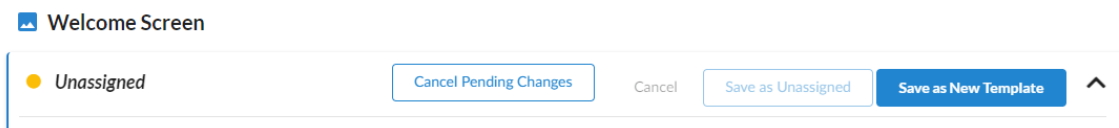
1. In the left sidebar menu of Solstice Cloud, click **Manage > Pods**.
2. In the Pod Template Assignments table, click the name of the Pod you want to configure.
3. In the Template Configuration section click the ▼ icon to expand the options available for a particular settings category.



4. Configure the settings as desired and then click **Save as Unassigned**.



A message appears confirming the Pod configuration has been updated. Additionally, until the configuration has been successfully applied to the Pod, an option is available to Cancel Pending Changes.



Define Default Templates

Each required Solstice Cloud configuration category contains one **Default** template. Mersive recommends configuring this template with the most common set of configuration options for the Solstice Pods in your organization's deployment. Then use the [Duplicate a Template](#) option to create variations of the template for groups of Pods that use different configuration options. For example, use the default Time/Locale template to configure the time zone for Pods in the main office, then duplicate the template and modify the duplicates for Pods located in other time zones.



Default templates are also used for pre-configuring Pod settings before the Pods are shipped. For customers in Mersive's Pre-Provisioning Program, Solstice Pods will automatically import into their Solstice Cloud account, significantly reducing the time needed for Pod deployment upon arrival. Reach out to your sales representative for inquiries into the Pod Pre-Provisioning Program.

1. In the left sidebar menu of Solstice Cloud, click **Manage > Templates**.
2. From the list of configuration categories that appears below Templates, select the category you wish to configure.
3. Click the first template in the list, named **Default**, to see the available configuration options.
4. Configure the default settings as appropriate for the majority of Solstice Pods in your deployment.
5. Click **Save**. A green box confirming that the template was updated will briefly appear.


Create a New Template

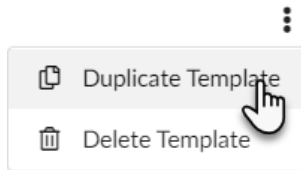
1. In the left sidebar menu of Solstice Cloud, click **Manage > Templates**. A list of available configuration templates will appear in the sidebar.
2. From the list of configuration categories that appears below Templates, select the category you wish to configure.
3. Click **Create New Template**.
4. Enter a descriptive **Template Name**. For example, you could name the template by location (London Office) or appearance (Mountain Theme), as appropriate for its purpose.
5. Configure the settings you wish to be applied to the Solstice Pods using this template.
6. Click **Save**.



Most settings can be configured collectively in templates, but you may occasionally see settings or values labeled "Unique to Pod" that will need to be set for each Pod individually. See [Apply Settings to Individual Pods](#) for details.

Duplicate a Template

1. In the left sidebar menu of Solstice Cloud, click **Manage > Templates**.
2. From the list of configuration categories that appears below Templates, select the category you wish to configure.
3. For the template you wish to duplicate, click the vertical ellipsis  icon, then select **Duplicate Template**.



4. Give the duplicated template a descriptive **Template Name**, ideally related to its purpose, and change the configuration settings as needed.
5. Click **Save**.

Assign a Template to a Pod

1. In the left sidebar menu of Solstice Cloud, click **Manage > Pods**.

The Pod Template Assignments table displays. This table is used to apply templates across your deployment. You can apply a template to multiple Pods at once.



You can use the filters from the categories you have created to sort Pods in your deployment and make applying templates across your deployment easier. Filters allow you to apply templates by criteria such as location or campus, depending on the categories you have created and assigned to Pods.

2. Select the checkboxes of the Pods you want to apply the template to. You can select each Pod's checkbox individually, or select the checkbox in the header row of the table to select all Pods you have access to in the table.

Search...		Pod Temp	
Production			
		Name ▲	Welcome Screen
<input checked="" type="checkbox"/>	●	180 Break Gen3, version 4.5.18332	Mtn Theme
<input checked="" type="checkbox"/>	●	Dan's Office Gen3, version 4.5.18332	Unassigned
<input checked="" type="checkbox"/>	●	Martin's Office Gen3, version 4.5.18332	Unassigned
<input checked="" type="checkbox"/>	●	Mercury Lounge Gen3, version 4.5.18332	Unassigned

- For each template you want to apply, go to the corresponding template type column (e.g., Welcome Screen). You can view a different group of template columns by selecting the group name in the upper right-hand corner of the table.

Search...

Pod Template Assignments

Features

Network



Settings

Production

<input type="checkbox"/>		Name	Welcome Screen	Features	Digital Signage	Calendar	Message Center
<input type="checkbox"/>	<div></div>	<div>180 Break</div> <div>Gen3, version 4.5.18332</div>	Mtn Theme	Screen Key...	Disabled	Unassigned	Unassigned

- Click the corresponding drop-down for one of the checked Pods in the table, then select the name of the created template. This will apply the template to all of the checked Pods.

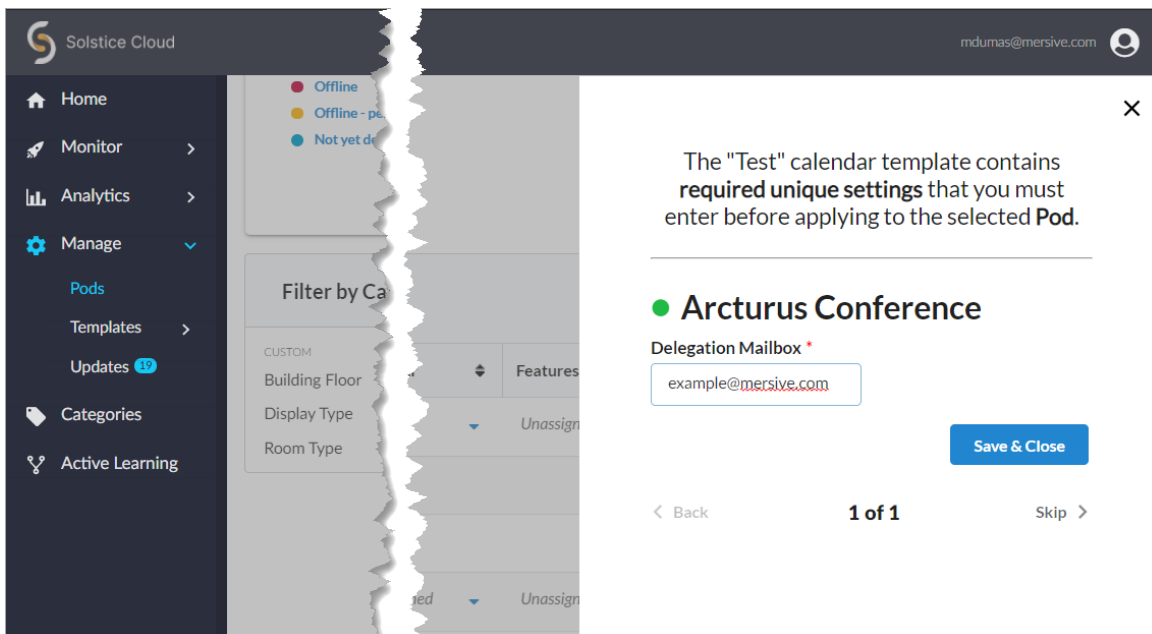
Digital Signage	Calendar
Disabled	Unassigned
Disabled	Unassigned
18 Pods selected	
Unassign	
AppSpace	
Mersive Feed	
default	
Disabled	
Mersive Feed	Unassigned

5. A pop-up will ask you to confirm the changes. Click **Confirm**. A green notification that the template was applied then displays.
6. As changes are being applied, a loading  icon will appear next to the Pod, and the pending changes  icon will appear next to the template(s) being applied. Once the changes are applied, the Pod's normal status will resume.



If a Pod is offline, any changes made will be applied when the Pod is back online.

7. If a template you applied has any unique settings that need to be applied each Pod individually, a sliding pop-up will appear prompting you to enter the needed information. Once you are done with all of the settings screens, click **Save & Close**.




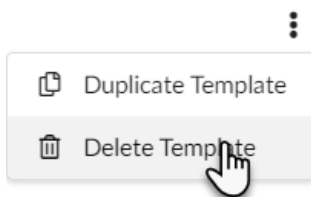
Edit a Template

1. In the left sidebar menu of Solstice Cloud, click **Manage > Templates**. A list of available configuration templates will appear in the sidebar.
2. From the list of configuration categories that appears below Templates, select the category you wish to configure.
3. Click on the template you wish to edit.
4. Edit or update any of the template's settings.

5. Click **Save**. If the template has been applied to any Pods, clicking Save will apply any changes to those Pods.

Delete a Template

1. In the left sidebar menu of Solstice Cloud, click **Manage > Templates**. A list of available configuration templates will appear in the sidebar.
2. From the list of configuration categories that appears below Templates, select the category you wish to configure.
3. For the template you wish to delete, click the vertical ellipsis  icon, then select **Delete Template**.



4. In the confirmation pop-up that appears, click **Delete**.

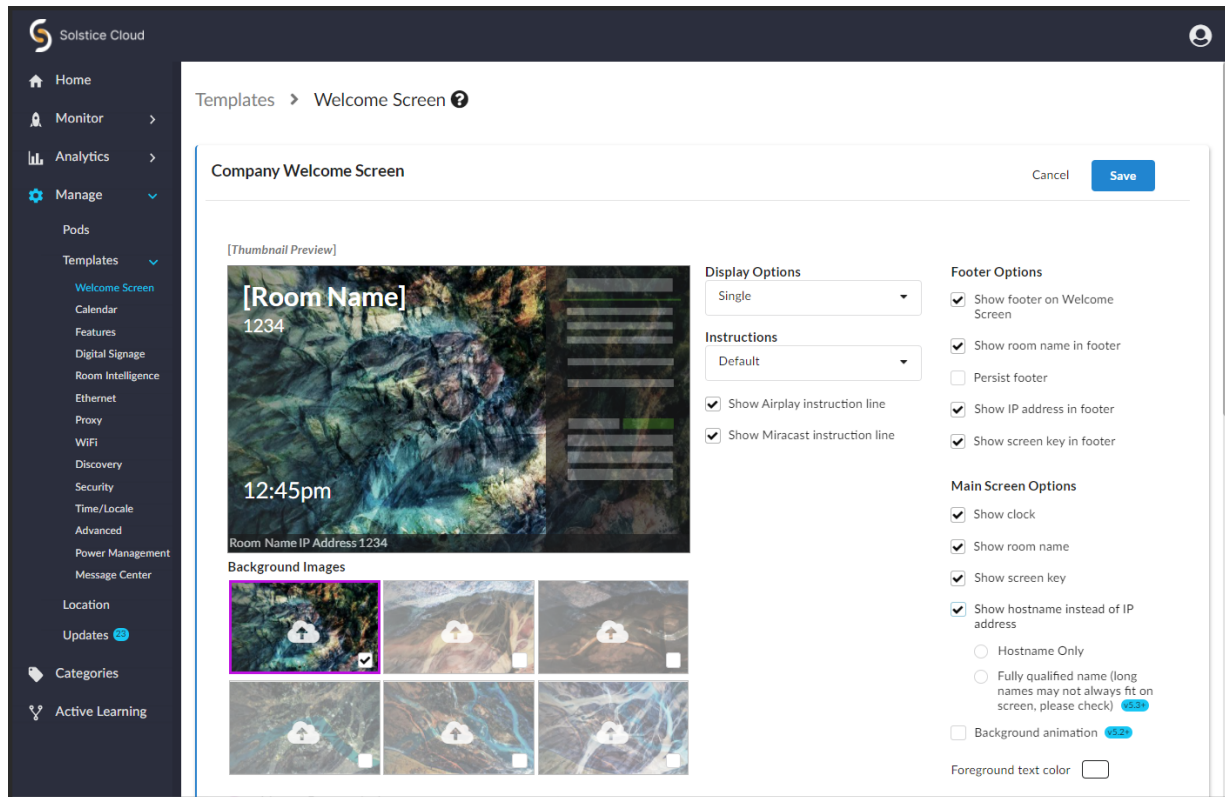
Perform Other Pod Actions

From the Pod Status screen, which can be selected from the left sidebar menu of the Solstice Cloud portal at **Manage > Pods**, you can perform the following Pod actions by clicking on the **Pod Actions** drop-down:

- Reboot Pod — This performs a hardware reboot on the Pod.
- Disconnect all users — This disconnects all users from Solstice Pod. For any users who are connected to the Pod, their Solstice Apps will remain open, but they will not be connected to the pod. They will need to re-enter the screen key to reconnect.
- Clear Screen — This clears any shared content from the Pod display. It does not disconnect the users.
- Power Management: Wake — This option wakes a Pod that has been suspended. It re-enables the HDMI signal to the display.
- Power Management: Suspend — This option disconnects all users from a Pod and suspends the HDMI signal to the display.

Welcome Screen Template

The Welcome Screen template gives you many options to customize the appearance of your Solstice display welcome screen to match your organization's branding by changing or uploading background images, adding custom connection instructions, choosing the text color, and more.



How To

Access This Page

1. From the Solstice Cloud Home page, in the left sidebar navigation panel, click **Manage > Templates > Welcome Screen**.

Create a New Template

1. Click **Create New Welcome Screen Template**.
2. Enter the template name. For example, you could name the template by location (London Office) or descriptively (Mountain Theme).

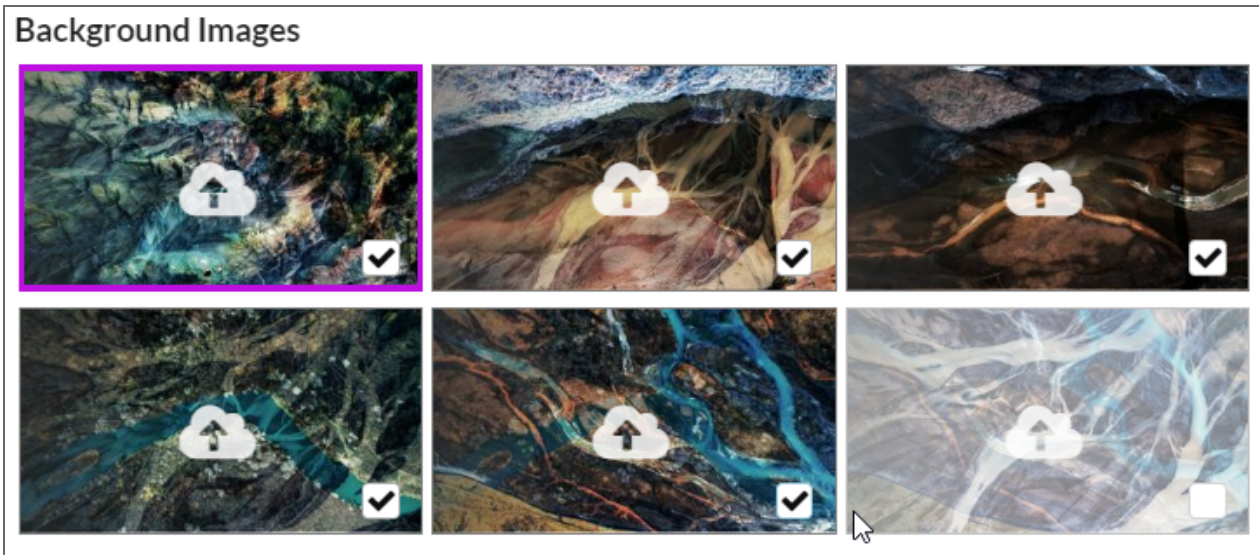
- Once you are done creating and customizing your template, click **Save** in the top right corner of the template. Once a template is saved, it can be assigned to Pods. Templates can be edited or deleted at any time.



You can also start by duplicating an existing template and making changes to it. Click on the three dots on the right side of the template you want to start with, and choose **Duplicate Template**.

Manage Background Images

The **Thumbnail Preview** displays how the Welcome Screen will look with the current settings. This preview will change as you edit options on the page. Below the preview, you can manage the **Background Images**. You can have up to six background images, and the Welcome Screen will rotate through the images that have been enabled.



- To change the background image to one of your own, click on the upload icon for that background image. Then browse to the image file and select.
- Disable background images from the rotating display by deselecting the checkbox in the lower right-hand corner of the background image preview.
- Click **Save**.

Manage Display Options

If you are using two monitors, you can control how the screens are displayed. From the Display Options drop-down, select how you would like Pods assigned to this template to display on connected

monitors. Display options are available for Pods that are connected to a single display monitor, or dual (two) display monitors.

1. Select one of the following options based on your preferences and Pods' display configuration:
 - **Single** (default): Select this setting for Pods connected to a single display monitor.
 - **Dual - Mirror**: Select to have Pods display the same (mirror) content on two connected display monitors.
 - **Dual - Extend**: Select to have Pods treat two connected displays as a single collaboration panel. Content can be shared to both displays and moved between them. Solstice intelligently knows where one display ends and the next begins and will not break a content post across the two displays.
 - **Dual - Seamless Extend**: Select to have content posted across two displays as if they are a single seamless display. This mode is recommended for video walls or other setups where there is no bevel or seam between the two displays.
2. Click **Save**.



Dual output display options are only available for Gen3 Pods with dual HDMI out.

Customize Connection Instructions

Connection instructions give end-users the information they need to connect to Solstice. You can customize these instructions according to how your organization has configured Solstice to allow users to quickly connect.

1. From the Instructions drop-down, select how you would like the connection instructions to display on the Welcome Screen for end-users.
 - **Default**: Selecting this setting displays Solstice's default connection instructions to meeting attendees on the Welcome Screen.
 - **Show custom instructions**: Allows the creation of custom connection instructions specific to your organization's Solstice configuration.
2. When **Show custom instructions** is selected, a rich text field appears below, allowing you to enter and format custom connection instructions.



You can include responsive variables, which will be automatically replaced with Pod-specific information, in your custom instructions. Available variables are [RoomName], [ScreenKey], [WifiNetworkName], [WifiIP], [EthNetworkName], and [EthIP]. Note that variables are case sensitive.

3. To hide the Airplay instructions, deselect the **Show Airplay instruction line** checkbox.
4. To hide the Miracast instructions, deselect the **Show Miracast instruction line** checkbox.

Instructions

Show custom instructions ▼

☒ Show Airplay instruction line
☒ Show Miracast instruction line

Customize the text in your instructions:
[RoomName], [ScreenKey], [WifiNetworkName],
[WifiIP], [EthNetworkName], [EthIP]

B **I** **A**

To get started:

1. Connect your device to **[EthNetworkName]**
2. Open the Solstice App
3. Tap **[RoomName]**
4. Enter **[ScreenKey]** when prompted for the Screen Key
5. Share content to this screen!

First time? Visit **https://[EthIP]**

Tip: Stash on-screen content by dragging it to the dock on the left

5. Click **Save**. A message displays confirming that the Pod configuration has been updated.

Set Footer Options

The footer at the bottom the Welcome Screen shows information for users to easily discover and connect to that Solstice Pod's display. Solstice allows you to set whether or not this presence bar shows, as well as the information it contains.

1. Select the following options as appropriate to your Solstice configuration and preferences:
 - **Show footer on Welcome Screen:** Displays the presence bar as a footer on the Welcome Screen.
 - **Show room name in footer:** Displays the room/display name.
 - **Persist footer:** Footer always displays, even during collaboration sessions.
 - **Show IP address in footer:** Displays the Pod's IP address or DNS hostname.
 - **Show screen key in footer:** If a screen key is enabled on a Pod, this option displays the 4-digit screen key required to connect to the Pod.
 2. Click **Save**.
-

Manage Main Screen Options

These options control elements that display on the Welcome Screen, such as the clock or the room name.

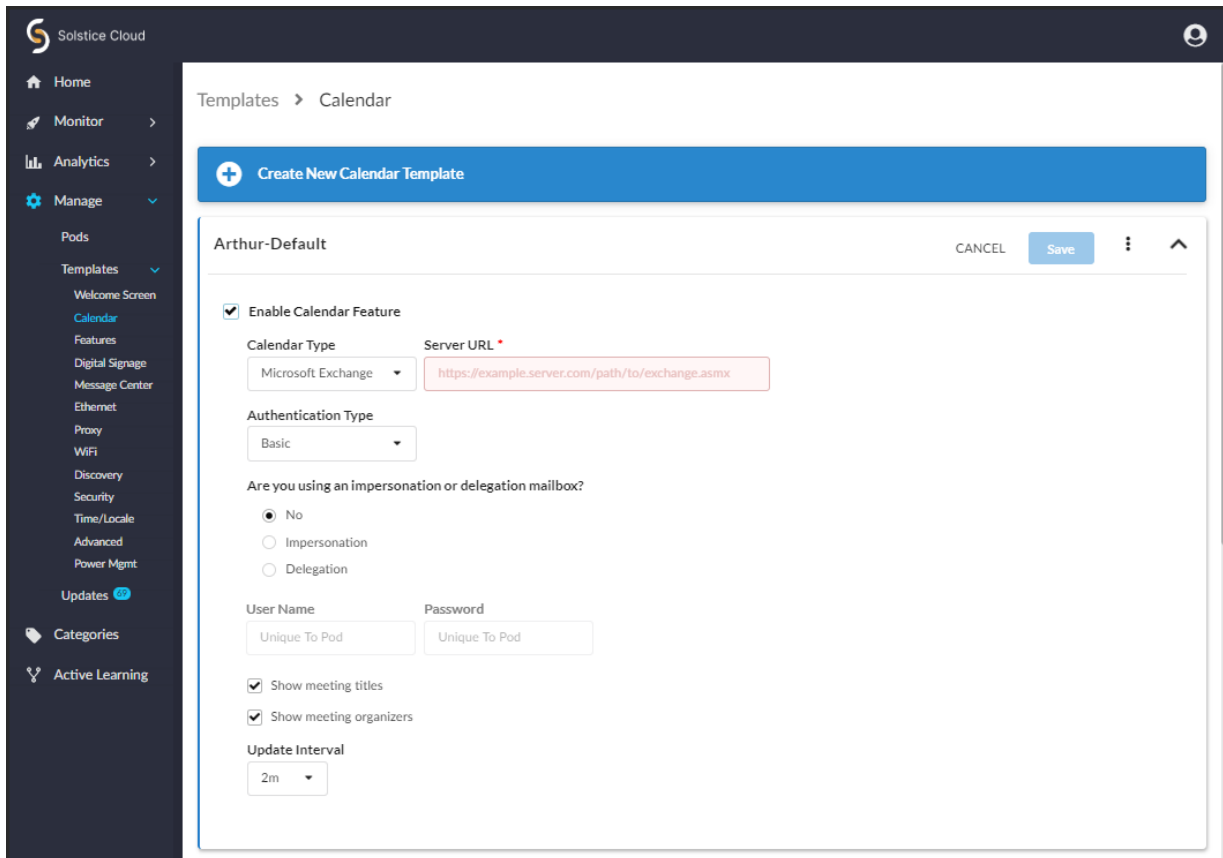
1. Preview how the footer in the Thumbnail Preview changes as you select or deselect the following options:
 - **Show clock**
 - **Show room name**
 - **Show screen key** (if screen key is enabled)
 2. Select **Show hostname instead of IP address** to display the hostname of the Pod rather than its IP address on the Welcome Screen. (No preview available.)
 - Choose **Hostname Only** to show only the name of the individual Pod.
 - Choose the **Fully qualified name** option to display the Pod's fully qualified domain name.
 3. Select **Background animation** to enable a slow-moving pan back and forth on the selected background image(s) to mitigate potential display burn-in (particularly useful when using only one background image).
 4. To change the color of the text on the Welcome Screen, find the **Foreground text color** option under the **Main Screen Options** and click on the color preview box (white by default). You can either select a color using the color picker or enter the 6-digit hex code of the color you wish to use.
-



5. Click **Save**.

Calendar Template

The Calendar template allows you to display the schedule and calendar information for the room when there is no other content being shared. Participants can see if the space is currently scheduled or available, as well as the next three upcoming meetings in the space.



The screenshot shows the 'Create New Calendar Template' form in the Solstice Cloud interface. The left sidebar contains navigation links: Home, Monitor, Analytics, Manage, Pods, Templates (selected), Welcome Screen, Calendar (selected), Features, Digital Signage, Message Center, Ethernet, Proxy, WiFi, Discovery, Security, Time/Locale, Advanced, Power Mgmt, Updates, Categories, and Active Learning. The main content area is titled 'Templates > Calendar' and features a blue 'Create New Calendar Template' button. Below this, the form is titled 'Arthur-Default' and includes a 'CANCEL' button and a 'Save' button. The form fields are as follows:

- ☒ Enable Calendar Feature
- Calendar Type: Microsoft Exchange (dropdown)
- Server URL: <https://example.server.com/path/to/exchange.asmx> (text input)
- Authentication Type: Basic (dropdown)
- Are you using an impersonation or delegation mailbox?
 - ☒ No
 - ☐ Impersonation
 - ☐ Delegation
- User Name: Unique To Pod (text input)
- Password: Unique To Pod (text input)
- ☒ Show meeting titles
- ☒ Show meeting organizers
- Update Interval: 2m (dropdown)

How To

Access This Page

1. From the Solstice Cloud Home page, in the left sidebar navigation panel, click **Manage > Templates > Calendar**.

Create a New Calendar Template

1. Click **Create New Calendar Template**.
2. Enter the **Template Name**. For example, you could name the template by location (London Office) or descriptively (Mountain Theme).
3. Click **Save**.



You can also start by duplicating an existing template and making changes to it. Click on the three dots on the right side of the template you want to start with, and choose **Duplicate Template**.

Integrate a Microsoft Exchange Calendar with a Solstice Display

As a note, if you integrate a Microsoft Exchange account and do not supply an impersonation or delegation account, the personal calendar for that account will be used.

1. Select the **Enable Calendar Feature** checkbox.
2. From the **Calendar Type** drop-down, select **Microsoft Exchange**.
3. In the **Server URL** field, enter the Microsoft Exchange server URL if that is the type of calendar you are integrating.
4. In the **Authentication Type** drop-down, select the type of authentication your Microsoft Exchange server is using: Basic or NTLM.
5. Enter in the **Username** and **Password** for the room calendar account.
6. If you are using an **Impersonation** or **Delegation Mailbox**, enter them into the corresponding fields.
7. By default, the meeting titles and meeting organizers will be visible on the display unless the meeting is marked in the organizer's calendar application as "private". If you wish to hide these for all meetings, disable the corresponding options under **Privacy Settings**.
8. From the **Update Interval** drop-down, select the frequency at which the Pod will update the calendar meeting information visible on the display.
9. Click **Save**.

Integrate a Google Calendar with a Solstice Display

For more information about the additional Google Workspace configurations needed to integrate with Solstice, as well as how to obtain the necessary information for the fields below, see [Google Workspace Settings for Integrating Resource Calendars with Solstice](#).

1. Select the **Enable Calendar Feature** checkbox.
 2. From the **Calendar Type** drop-down, select **Google Calendar**.
 3. Click **Upload service account credentials**.
 4. Navigate to the location of the service account file you created for the Pod and select it.
 5. In the **Room Email** field, enter the resource email address.
-

6. By default, the meeting titles and meeting organizers will be visible on the display. If you wish to hide these for all meetings, disable **Show meeting titles** and **Show meeting organizers**.
7. From the **Update Interval** drop-down, select the frequency at which the Pod will update the calendar meeting information visible on the display.
8. Click **Save**.

Integrate an Office 365 Online Calendar with a Solstice Display

If you integrate an Office365 account and do not supply an impersonation or delegation account, the personal calendar for that account will be used.

For more information about the additional O365 configurations need to integrate with Solstice, as well as how to obtain the necessary information for the fields below, see [Updating Your Organization's Office 365 Calendar Configurations](#).



Mersive strongly recommends configuring the OAuth2 authentication type as Microsoft is ending its support for Basic authentication in 2021.

1. Select the **Enable Calendar Feature** checkbox.
2. From the **Calendar Type** drop-down, select **Office 365 Online**.
3. In the **Authentication Type** drop-down, select **OAUTH2**.
4. In the Tenant ID field, enter the **Tenant ID**.
5. In the Client ID field, enter your **Client ID**.
6. In the Client Secret field, enter the **Client Secret**.
7. By default, the meeting titles and meeting organizers will be visible on the display unless the meeting is marked in the organizer's calendar application as "private". If you wish to hide these for all meetings, disable the corresponding options under **Privacy Settings**.
8. From the **Update Interval** drop-down, select the frequency at which the Pod will update the calendar meeting information visible on the display.
9. Click **Save**.

A message displays confirming that the Pod configuration has been updated.

Integrate a 3rd Party Calendar with a Solstice Display



Utilizing this option to integrate a third-party calendar requires advanced

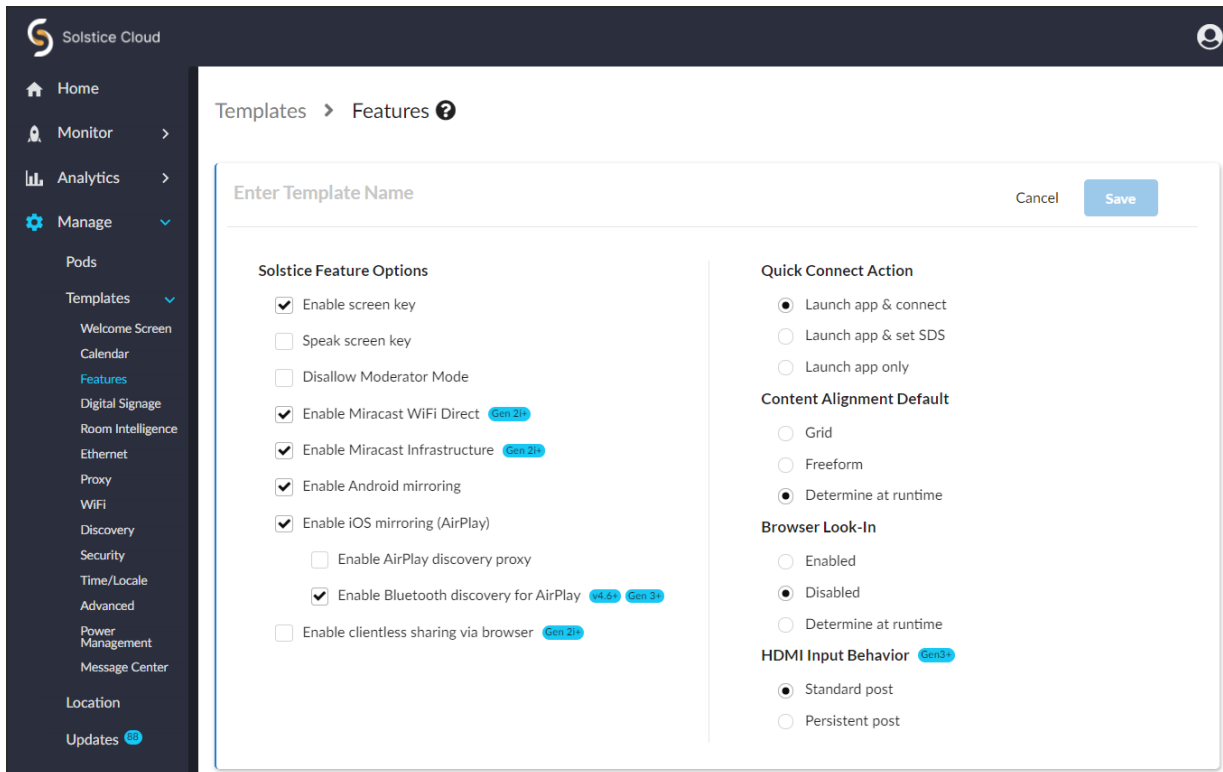


configurations using our [OpenControl API](#).

1. Select the **Enable Calendar Feature** checkbox.
 2. From the **Calendar Type** drop-down, select **3rd Party Only**.
 3. If you wish to hide meeting titles or meeting organizers from being visible on the room display, deselect **Show meeting titles** and/or **Show meeting organizers**.
 4. From the **Update Interval** drop-down, select the frequency at which the Pod will update the calendar meeting information visible on the display.
 5. Click **Save**.
-

Features Template

The Features template allows you to configure options for how attendees may view and interact with the Solstice display. There are options that determine how attendees can connect to the meeting, as well as how they may view and share content on their personal devices. Miracast support for Windows devices can also be enabled. For more information on how to configure Solstice to support sharing with AirPlay and Miracast, see [Enable Sharing with AirPlay](#) and [Enable Sharing with Miracast](#).



How To

Access This Page

1. From the Solstice Cloud Home page, in the left sidebar navigation panel, click **Manage > Templates > Features**.

Create a New Features Template

1. Click **Create New Features Template**.
2. Enter the **Template Name**. For example, you could name the template by location (London Office) or descriptively (Mountain Theme).

3. Once you are done creating and customizing your template, click **Save** in the top right corner of the template. Once a template is saved, it can be assigned to Pods. Templates can be edited or deleted at any time.



You can also start by duplicating an existing template and making changes to it. Click on the three dots on the right side of the template you want to start with, and choose **Duplicate Template**.

Enable Screen Key

When enabled, this option requires in-room users to enter the randomly generated screen key on the Solstice display before they can connect. An accessibility option to speak the screen key can also be selected.

1. In the **Solstice Feature Options** section, select **Enable screen key**.
2. If desired, select the **Speak screen key** option to have the screen key read aloud when a user attempts to connect to the display. If multiple connection attempts occur in short succession, the screen key will be spoken a maximum of once every 10 seconds.
3. Click **Save**.

Disallow Moderator Mode

Moderator Mode allows you to approve or deny requests from users to join the session or post content to the display. Moderator Mode is enabled by default.


1. To disable Moderator Mode, select **Disallow Moderator Mode**.
2. Click **Save**.

Enable Miracast

Users can mirror their Windows device screens to a Solstice Pods via Miracast in two ways: either over the existing network infrastructure the Pod is connected to, or directly to the Pod via a wireless P2P stream.

1. To enable Miracast mirroring, apply the appropriate settings for your Pods' network configuration based on the table below.

Network	Miracast Configuration in Solstice Cloud
---------	--

Configuration	
Ethernet Only (recommended)	<ul style="list-style-type: none"> Select both Enable Miracast Infrastructure and Enable Miracast WiFi Direct. <div>  WiFi must also be enabled on Pods for Miracast discovery. In the WiFi configuration, select Enable WiFi, choose Existing Network, set Security Type to Open, and leave SSID blank. (The wireless interface will only be used for Miracast discovery.) </div>
Wirelessly Attached to Existing Network Only	<ul style="list-style-type: none"> Select Enable Miracast Infrastructure.
Ethernet + Wirelessly Attached to Existing Network	<ul style="list-style-type: none"> Select Enable Miracast Infrastructure.
Ethernet + Wireless Access Point	Miracast not supported. When the Pod is acting as an access point, Miracast discovery cannot operate. Contact Mersive to discuss other options like attaching your Pod to an existing network.
Wireless Access Point Only	

2. Click **Save**.



For more about Miracast and configuring it for your organization's needs, see [Enable Sharing with Miracast](#).

Enable Android Mirroring

Android mirroring allows users to mirror the screen of their Android mobile device to the Pod display via the Solstice app.

1. Select **Enable Android mirroring**.
2. Click **Save**.

Enable iOS Mirroring (AirPlay)

There are a number of available options for allowing iOS users to mirror their device screens to a Pod display, depending on your network configuration and preferences.

1. To allow users to mirror their iOS device screen to the Pod, select **Enable iOS mirroring (AirPlay)**.
2. Select the **Enable AirPlay discovery proxy** option if your network does not allow use of Apple's Bonjour.
3. Select the **Enable Bluetooth discovery for AirPlay** option to allow end-users to discover the Solstice display without having to first connect to the network.



This option provides another alternative for discovery in environments that do not allow UDP broadcast traffic or Apple's Bonjour protocol. Available starting on Solstice 4.6 and Gen3 Pods. Users must still connect to the same network as the Pod in order to stream content via AirPlay.

4. Click **Save**.



For more information on how to configure AirPlay, see [Enable Sharing with AirPlay](#).

Enable Clientless Sharing via Browser

This option allows users to connect and share content via a web browser without the Solstice App.

1. Select **Enable clientless sharing via browser** Available to Gen2i and Gen3 Pods only.
2. Click **Save**.

Select Quick Connect Action Options

These options determine the behavior of the Solstice app when an end-user first downloads it from the Pod.

1. Select one of the following options:

- **Launch app & connect:** Once installed, the Solstice app will launch, and the app will automatically connect to the display.
- **Launch app & set SDS:** Once installed, the Solstice app will launch, and Solstice will automatically set the SDS address in the Solstice app. This automatically populates the list of discovered displays for users to easily find and connect to a Solstice display.



For this capability to work, the Pod must have an SDS host address defined in the [Discovery Template](#).

- **Launch app only:** Once installed, the Solstice app will launch but will not automatically connect to a display or set the SDS address.

2. Click **Save**.

Select Content Alignment Default Options

These settings determine how content shared to Solstice will be aligned on the display.

1. Select one of the following options:

- **Grid:** The content alignment is set to grid mode, which automatically aligns content into a grid-like pattern. End-users will not be able to change the alignment.
- **Freeform:** The content alignment is set to free-form mode, which allows content to be moved around without being restricted to a grid. End-users will not be able to change this setting.
- **Determine at runtime** (recommended): Allows end-users to set the preferred content alignment mode when they use the Solstice app.

2. Click **Save**.

Select Browser Look-In Options

These options are used to specify whether end-users can view collaboration sessions remotely using a web browser.

1. Select one of the following options:

- **Enabled:** End-users will be able to view collaboration sessions remotely using a web browser by entering the IP address on the Solstice display.

- **Disabled:** End-users will not be able to view collaboration sessions remotely.
- **Determine at runtime:** When a collaboration session begins, end-users can decide if the collaboration session may be viewed remotely.



If the security of your collaboration sessions is a concern, Mersive recommends selecting **Disabled**.

2. Click **Save**.

Select HDMI Input Behavior Options

These options set the default behavior for a wired source connected to the HDMI-in port of a Gen3 Pod.

1. Select one of the following options:

- **Standard Post** (default): If a wired HDMI-in source is connected to the Solstice Pod, it will be treated as a standard Solstice content post.
- **Persistent Post:** If a wired HDMI-in source is persistently connected to the Solstice Pod, it will display full screen when there are no other posts shared to Solstice. When another post is shared, the wired HDMI-in source is automatically moved off screen to the dock. When all wireless posts are deleted, the wired HDMI-in source automatically returns to full screen. This mode is designed to support wired inputs that should appear anytime users are not actively sharing content to Solstice.



When in **Persistent Post** mode, the wired HDMI-in source cannot be deleted by other Solstice users. To remove the post, the wired HDMI-in source must be unplugged.

2. Click **Save**.



Want to enable Solstice Conferencing, location services, or occupancy data? See the [Room Intelligence Template](#).

Enable Sharing with AirPlay

Screen mirroring for Mac and iOS devices is available through Solstice's support for AirPlay® mirroring. This allows users to wirelessly stream their screen to the Solstice display in real-time without having to install an app. If your network does not allow UDP broadcast traffic or Apple's Bonjour protocol, Solstice provides an AirPlay discovery proxy alternative that can be utilized instead.

Network Routing Requirements

The following network ports/routes are required to support AirPlay streaming to Solstice Pods.

- **TCP ports 6000-7000, 7100, 47000, and 47010:** Allow inbound AirPlay traffic to the Solstice host.
- **UDP port 5353:** Required for iOS mirroring via the Bonjour protocol. It is not required when using the Solstice Bonjour Proxy.
- **UDP ports 6000-7000, and 7011:** Allow inbound AirPlay traffic to the Solstice host.



For more information on all of the network ports that Solstice utilizes, see [Open Network Ports](#).

How To Enable Sharing with AirPlay in Solstice Cloud

1. Log in to [Solstice Cloud](#). In the left sidebar navigation, expand the **Manage** category and select **Pods**.
2. From the table, click the name of the Pod to be set up for Miracast. Scroll down to the **Template Configuration** section and click the ✓ icon to the right of **Features**. If the Pod was previously assigned to a Features template, click **Edit** to change its Features settings individually.
3. To allow users to mirror their iOS device screen to the Pod, check **Enable iOS mirroring (AirPlay)** in the left column.
4. If your network does not allow UDP broadcast traffic, check one of the following options:
 - **Enable AirPlay discovery proxy**- Utilizes an alternative discovery proxy if the network does not allow the use of Apple's Bonjour. Note: This option may not support video sharing.
 - **Enable Bluetooth discovery for AirPlay** - Allows Bluetooth-enabled Apple devices to discover and connect to the Pod using Bluetooth. The Solstice display will appear in their device's list of available Bluetooth devices. However, users will have to connect to the same network as the Pod in order to stream content via AirPlay.

5. Save the AirPlay settings changes with the option that best fits your situation:

- Click **Save as Unassigned** to save the Pod's settings uniquely (not assigned to a template).
- Click **Save as New Template** to create a Miracast-enabled template that other Pods can be assigned to in the Pods table.

Enable Sharing with Miracast

Screen mirroring for Windows devices is available through Solstice's support for Miracast streaming. This allows users to wirelessly mirror or extend their screen to the Solstice display in real-time without having to install an app.

Solstice's support for Miracast works in two stages. In the discovery stage, a Miracast-enabled device searches for active Miracast receivers nearby for the user to connect and stream to. This requires the Solstice Pod's wireless network interface card to be enabled and not acting as a wireless access point. In the second stage, the device streams content to the Miracast receiver using either an existing network (Miracast over Existing Network) or a peer-to-peer wireless connection (WiFi Direct).

Solstice's Miracast support has three modes:

- **Over Existing Network/Infrastructure and WiFi Direct (recommended).** Allows Pods to dynamically select best video streaming mode. Most robust device connection and setup configuration. Windows 8, Windows 10, and Android devices supported.
- **Over Existing Network/Infrastructure.** Leverages existing network to support larger number of simultaneous Miracast users. All Miracast traffic is subjected to network security and monitoring. Windows 10 devices only supported.
- **WiFi Direct.** Good for use cases where one Miracast device will be used at a time. Windows 8, Windows 10, Android devices supported.

Network Routing Requirements

The following network ports/routes are required to support Miracast streaming to Solstice Pods.

- **TCP port 7236:** WiFi Direct control port used to establish and manage sessions between the source device and the Pod.
- **TCP port 7250:** Port on which the Pod listens for Miracast packets when Over Existing Network mode is enabled.
- **UDP port 5353:** If Miracast Over Existing Network mode is enabled, this port is used for multicast DNS (mDNS). mDNS is broadcast to the local subnet of each network interface the Pod is connected to. If the computer that is attempting to make an infrastructure connection is on a different subnet, this broadcast will fail. If this happens, a workaround is to create a DNS entry to the Pod's hostname.

- For for Gen2i Pods, confirm that port **32768:60999** is also open.
- Ensure that the IP address space for WiFi Direct (**192.168.49.***) is not behind a firewall.



Miracast may utilize any non-privileged UDP port from 1024 to 65535 for video streaming.

Important Considerations

- Miracast requires that the Pod be located in close proximity to the display. Miracast discovery operates over a range of approximately 150–200 feet. Only Pods within this range will be displayed in the Miracast source list on the client device.
- There are many factors that can affect the performance of Miracast streaming. For more information on Miracast performance by configuration and use case, view the [Miracast Performance Tech Note](#).

How To Enable Sharing with Miracast in Solstice Cloud

1. Log in to [Solstice Cloud](#). In the left sidebar navigation, expand the **Manage** category and select **Pods**.
2. From the table, click the name of the Pod to be set up for Miracast. Scroll down to **Template Configuration** section and apply the following settings, according to your network configuration based on the table below.

Pod's Network Configuration	Pod Configuration for Miracast in Solstice Cloud
Ethernet Only (recommended)	<ol style="list-style-type: none"> Expand the WiFi settings. Select Enable WiFi, choose Existing Network, and set Security Type to Open. This enables the wireless antenna for Miracast discovery. Do not enter an SSID to attach the WiFi interface to an existing network. This interface will remain idle and will only be used for the Miracast discovery stage. Use one of the Save options (see step 3 for details) to update the Pod. Expand the Features settings and select Enable Miracast Infrastructure and Enable Miracast WiFi Direct.
Wirelessly Attached to Existing Network Only	<ol style="list-style-type: none"> Select Enable Miracast Infrastructure.
Ethernet + Wirelessly	<ol style="list-style-type: none"> Select Enable Miracast Infrastructure.

Attached to Existing Network	
Ethernet + Wireless Access Point	Miracast not supported. When the Pod is acting as an access point, Miracast discovery cannot operate. Contact Mersive to discuss other options like attaching your Pod to an existing network.
Wireless Access Point Only	

3. Save the Miracast settings changes with the option that best fits your situation:

- Click **Save as Unassigned** to save the Pod's Features settings uniquely (not assigned to a template).
- Click **Save as New Template** to create a Miracast-enabled Features template that other Pods can be assigned to in the Pods table.

Digital Signage Template

Solstice's digital signage feature gives you the ability to extend HTML-based signage to Solstice displays when they are not being used for wireless collaboration. This feature allows you to add signage feeds to your Solstice-enabled meeting rooms, huddle rooms, and transitional spaces without the additional cost or complexity of deploying dedicated signage hardware.

When enabled, Digital Signage in Solstice defaults to Mersive's Solstice Pod information feed at <https://digitalsignage.mersive.com>. URL-based digital signage feeds such as Appspace, Carousel, 22Miles, Screenfeed, and Google Slides + Sites, as well as custom static welcome screens available at a web URL, are also supported.



Certain individual feeds, even from supported sources, may not work with Solstice. If the URL you are attempting to run is resource intensive, stability and performance can be negatively affected. However, Solstice version 4.4 and later will cache up to 1 GB of content.

Requirements

- Solstice Pods with Enterprise Edition Licenses
- Solstice version 4.0 or later (both Pods and Dashboard)
- Source URL content must be compatible with Android WebView.
 - Chrome browser and Android Webview are similar in many ways, but Android WebView will lack some advanced browser features and behaves best with less resource-intensive feeds.
 - Test your URL in Solstice and verify that it is playing well on a single display before rolling out to other Solstice Pods and/or leaving signage enabled on the Pod.

Layout Options

Some signage layout modes will render the source content in an HTML IFrame. The Solstice Platform supports three layout options: Full Screen, Footer Only, and Footer + Overlay. The digital signage source content is rendered differently depending on your layout choice.

Mode	Description	Notes
Full Screen	Signage content is displayed in full screen mode on the Solstice display. No Solstice connection information is shown – users must know Solstice display name in order to connect.	Source URL is rendered as a full-screen web page.
Footer Only	Only the Solstice welcome screen footer that displays the Pod's display name and/or IP address is shown over the signage content.	Source URL is rendered within an IFrame, so content must be embedded in an IFrame within the web-

		site used for the source URL.
Footer + Overlay	The Solstice welcome screen footer and a sidebar overlay are shown on top of digital signage to provide users with full connection instructions and/or room calendar information.	Source URL is rendered within an IFrame, so content must be embedded in an IFrame within the website used for the source URL.

Video Content

Video content is supported if it is in one of the following formats and configured to auto-start. The maximum video quality is 1080p at 60 frames per second and up to 20 Mbps.

- H.264 Baseline Profile Level 3
- VP8
- VP9

Supported Authentication Methods

Some signage systems provide mechanisms to identify the device with which it is communicating. This can be helpful to tailor content to groups of devices, to prevent unauthorized access to the feed content, and for analytics.

The Solstice digital signage playback supports the following authentication methods:

Scheme	Description
Open	The signage URL is not protected by an authentication scheme. The content will load in any network-connected browser for any user.
URL-Based	The signage URL is protected by a URL-based parameter. In this case, the content will only load when the URL parameter is provided.
Cookie or Local Storage	The signage URL will load an initial page that presents a unique identifier for the Pod. The signage administrator will record the code and enter it into the signage provider's device-management console. After this process is completed, a cookie or other browser-based persistent mechanism, like local storage, is utilized to store the identification information.
MAC Address	Primarily relevant to an on-premises signage system, the administrator will configure the Pod MAC address as part of the device configuration in the management console. This process may be automated by the signage system; however, the signage server and Solstice Pod must typically be on the same VLAN.

How To

Access This Page

1. In Solstice Cloud, go to the left sidebar navigation panel and click **Manage > Templates > Digital Signage**.

Create a New Digital Signage Template

1. Click **Create New Digital Signage Template**.
2. Enter the **Template Name**. For example, you could name the template by location (London Office) or descriptively (Mountain Theme).
3. Click **Save**.



You can also start by duplicating an existing template and making changes to it. Click on the three dots to the far right of the name of the template you want to start with, then choose **Duplicate Template**.

Set Digital Signage Options

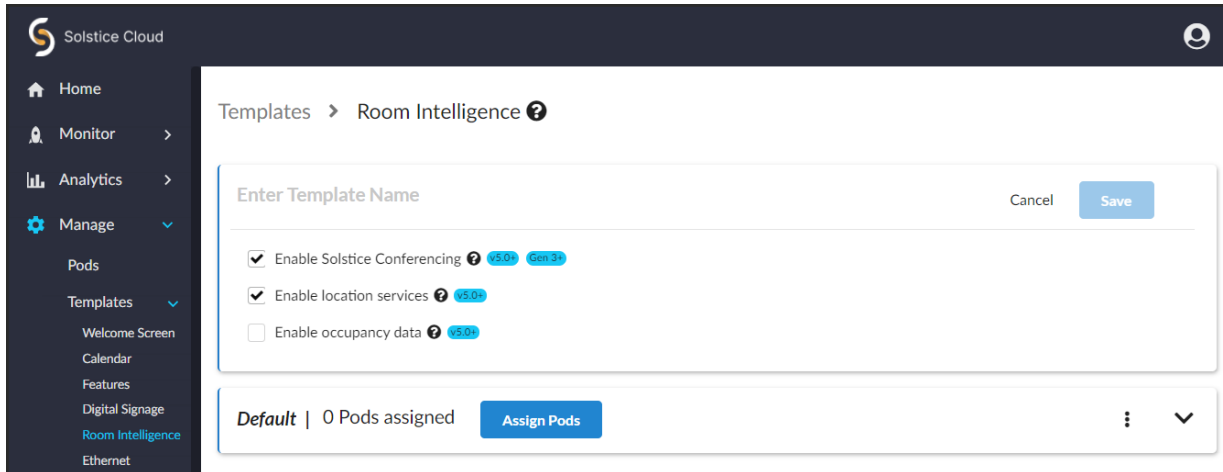
1. Select the **Enable Digital Signage** checkbox. This activates the digital signage options.
2. In the **Source URL** field, enter the URL of the digital signage feed or source content.
3. In **Start After**, select the amount of time after which you want the digital signage feed to start playing.
4. To the right of the thumbnail preview, select a digital signage display mode. The thumbnail preview will demonstrate a preview of how the digital signage feed will appear on the Solstice display.
 - **Full Screen:** Signage content is displayed full screen on the Solstice display. No Solstice connection information is shown — users must know Solstice display name or IP address in order to connect.
 - **Footer Only:** Only the Solstice welcome screen footer is shown over the signage content. Users familiar with Solstice will be able to see the Solstice display name and/or IP address in the footer area in order to connect and share content. The source URL must be viewable within an IFrame.
 - **Footer + Overlay:** The Solstice welcome screen footer and sidebar overlay are shown on top of digital signage to provide users with full connection instructions and/or room calendar information. The source URL must be viewable within an IFrame.
5. Click **Save**.



Some signage providers require you to register each Solstice display playing the digital signage feed as a signage endpoint. Refer to your digital signage content provider's instructions to complete this process as needed.

Room Intelligence Template

The Room Intelligence template page controls a suite of system preferences that allows your Solstice display to sense a conference room's configuration, status, and location and provide a simple, intuitive experience with any conferencing solution.



How To

Access This Page

1. From the Solstice Cloud Home page, in the left sidebar navigation panel, click **Manage > Templates > Room Intelligence**.

Create a New Room Intelligence Template

1. Click **Create New Room Intelligence Template**.
2. Enter the **Template Name**. For example, you could name the template by location (London Office) or descriptively (Occupancy On).
3. Click **Save**.



You can also start by duplicating an existing template and making changes to it. Click on the three dots on the right side of the template you want to start with, and choose **Duplicate Template**.

Enable Solstice Conferencing

When enabled, integrates any conferencing solution installed on the host's laptop (Zoom, Teams,

GoToMeeting, etc.) in Solstice-enabled rooms to allow flexibility and support for remote attendees



This feature is enabled by default.

1. Select **Enable Solstice Conferencing**.
2. Click **Save**.

Enable Location Services

When enabled, Solstice scans the environment (such as WiFi SSIDs and Bluetooth) to estimate the approximate geographic location of Pods. This allows Solstice app users to quickly connect to a Pod that they are physically nearby, streamlining the connection process.



This feature is enabled by default.

1. Select **Enable location services**.
2. Click **Save**.



Solstice's location services will not collect any personally identifiable information. Use of this feature is subject to the terms and conditions.

Enable Occupancy Data

When enabled, Solstice can use a USB camera attached to the back of a Pod to detect the number of occupants in the room and collect that data. This occupancy data can be visualized in Solstice Cloud Analytics.

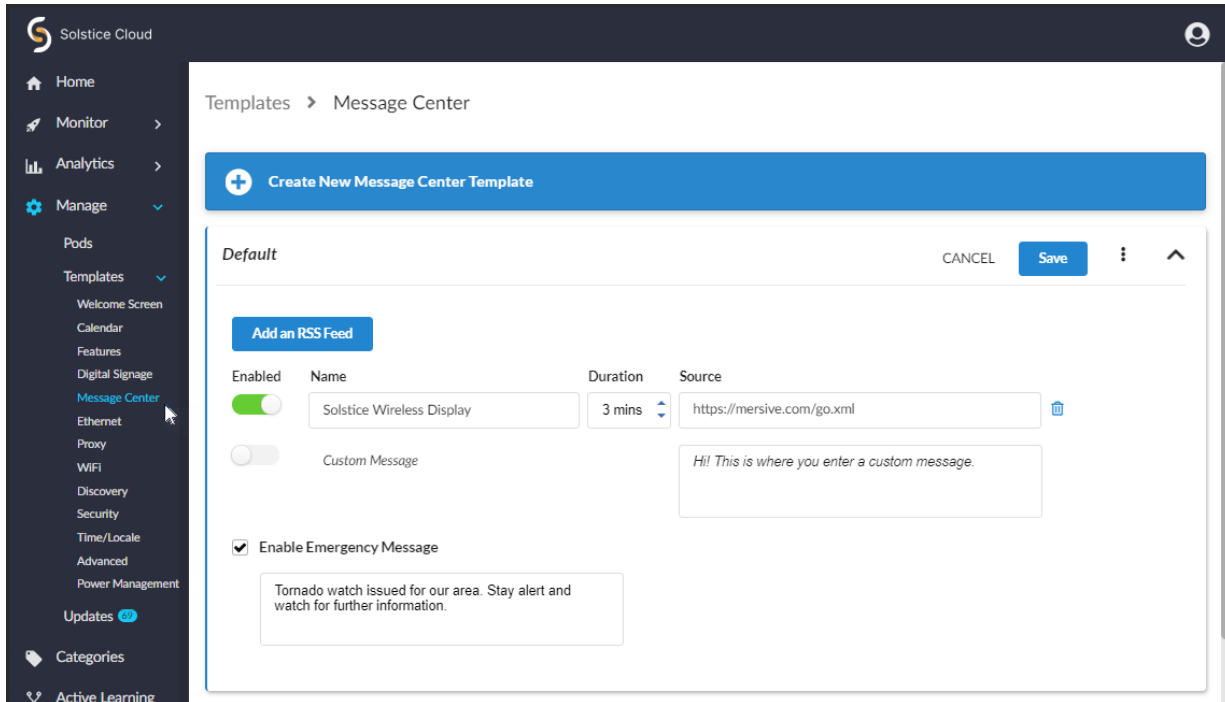


This feature is disabled by default.

1. Select **Enable occupancy data**.
2. Click **Save**.

Message Center Template

This feature allows you to add an RSS feed to a Solstice Pod's Welcome screen that will scroll across the top. You can also create and publish an emergency message that will be broadcast to all Pods it is published to.



How To

Access This Page

1. From the Solstice Cloud Home page, in the left sidebar navigation panel, click **Manage > Templates > Message Center**.


Create Message Center Template

1. Click **Create New Message Center Template**.
2. Enter the Template Name. For example, you could name the template by location (London Office) or descriptively (Mountain Theme).
3. Click **Save**.



You can also start by duplicating an existing template and making changes to it. Click on the three dots on the right side of the template you want to start with, and choose **Duplicate Template**.

Add an RSS Feed to the Welcome Screen

1. To add a new RSS feed, click the **Add an RSS Feed** button. A new row appears.
2. Enter in the **Name** of the RSS feed.
3. Set the **Duration** the RSS feed will display before displaying the next feed or custom message.
4. Enter in the **Source** RSS URL. The URL must point to a valid XML file with a root element type of <rss>.
5. To have a custom message display in the top banner, toggle the slide switch to enabled (it will be green when enabled), and enter your message in the Custom Message field.
6. Click **Save**.
7. To disable any of the RSS feeds or the custom message, toggle the Enabled option off. The toggle will slide to the left and turn grey to indicate it has been disabled.
8. To delete any of the RSS feeds, click the Delete  icon located to the right of the Source field.

Publish an Emergency Message

In the event of an emergency, Solstice can push an emergency message to Solstice displays that will appear across the top as an emergency banner. To publish an emergency message, you will first create a message as part of a template, and then assign that template to the pods you want to receive the emergency message.

1. Open an existing template or create a new template, then select the **Enable Emergency Message** checkbox.
2. In the field below, enter in the text of the emergency message.
3. Click **Save**. If this template is already applied to Pods, it will be immediately broadcast to those Solstice displays.
4. Close the template, then click **Assign Pods** OR go to **Manage > All Pods**.
5. Select the Pods you want to publish the emergency message to, then click the drop-down in the Message Center column and select your template. The emergency message is immediately broadcast to those Solstice displays, and overrides any content shared on those displays.

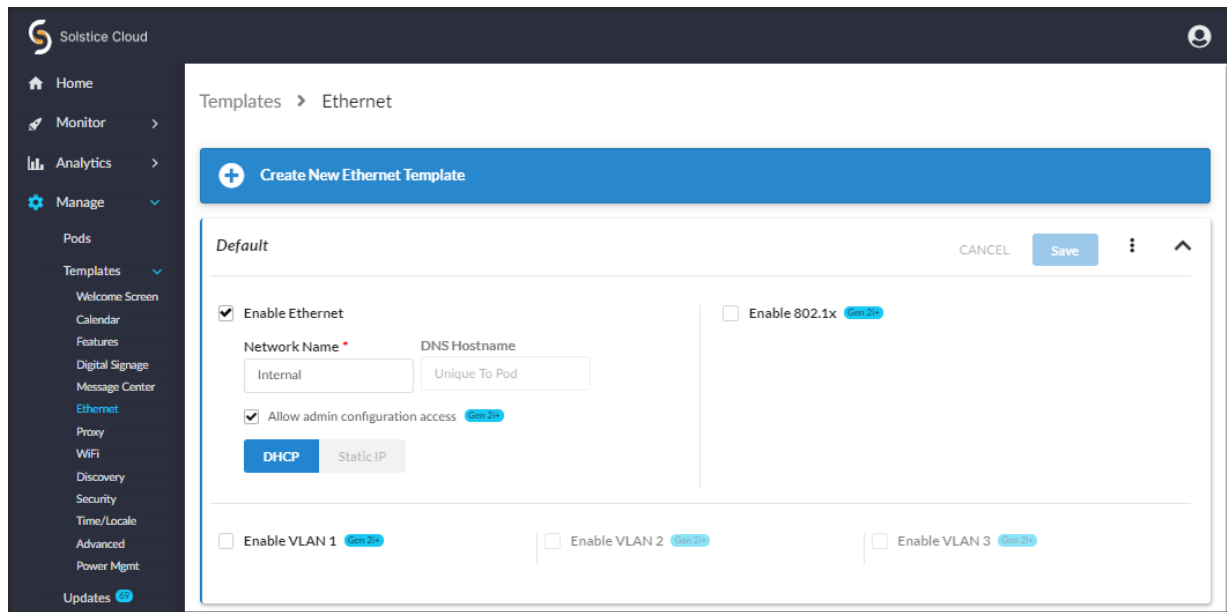
6. To disable the emergency message, you can either unassign the emergency message template, or you can deselect the Enable Emergency Message checkbox within the assigned message template.
-

Ethernet Template

Solstice is designed to leverage existing Ethernet networks to support collaboration in meeting rooms and learning spaces. These advanced network settings allow you to configure Solstice to meet the requirements of your IT security policy and network topology.

The Solstice Pod supports secure access to two independent network interfaces. Each is configured independently and uses its own routing table, supporting secure simultaneous access to the Pod from two segmented networks (for example, from a corporate and a guest network). When this dual-network configuration is chosen, the Firewall feature should be enabled.

The Ethernet template allows you to customize settings for Ethernet, 802.1x, and VLAN options and batch apply the settings across your deployment.



How To

Access This Page

1. From the Solstice Cloud Home page, in the left sidebar navigation panel, click **Manage > Templates > Ethernet**.

Create New Ethernet Template

1. Click **Create New Ethernet Template**.
2. Enter the Template Name. For example, you could name the template by location (London Office) or descriptively (Mountain Theme).

3. Click **Save**.



You can also start by duplicating an existing template and making changes to it. Click on the three dots on the right side of the template you want to start with, and choose **Duplicate Template**.

Edit Ethernet Options

1. To activate the options, select the **Enable Ethernet** checkbox.
2. Change the **Network Name** to the one that users will see in the list of available networks on their device.
3. If you wish to use DNS resolution and have added a DNS entry in your DNS server that resolves to the Pod's IP address, you can enter the DNS entry (for example, hostname.domain) in the **DNS Hostname** field. This field will be editable after this template is applied to a Pod. This will display the DNS hostname on the Pod's welcome screen instead of its IP address, which allows users to type the hostname into a browser to easily download the Solstice app.



Note that the DNS Hostname is unique to each Pod, and can be added only after this template is applied to a Pod. You will need to enter this information for each Pod this template is applied to.

4. If you wish to allow admin access to make configuration changes on this network, select the **Allow administrative configuration access** checkbox.
5. Select either **DHCP** for the Pod to be dynamically assigned an IP address, or select **Static IP** to enter your network configuration manually.
6. If you selected Static IP, enter the **Gateway**, **Network Prefix Length** and **DNS 1** fields. Because it is unique to each Pod, you will enter the IP Address after this template is applied to a Pod.



Note that the IP Address is unique to each Pod, and can be added only after this template is applied to a Pod. You will need to enter this information for each Pod this template is applied to.

7. Click **Save**.

Enable 802.1x Authentication



You must ensure that the Pod has access to a timeserver so that it can validate the certificate.

1. Select the **Enable 802.1x** checkbox to see options appear.
2. Select the **EAP Method**: PEAP, TLS, or TTLS
 - a. For PEAP or TTLS methods:
 - From the **Phase 2 Authentication** drop-down, select one of the phase 2 authentication types: None, MSCHAPV2, or GTC.
 - Click the **Replace CA Certificate** button, then browse to and select the certificate.
 - b. For the TLS method:
 - Click the **Replace CA Certificate** button, then browse to and select the certificate.
 - Click the **Replace User Certificate** button, then browse to and select the certificate.



Supported certificate file types are .cer, .der, .pem, .crt, .pfx, and .p12.

3. If required, enter the **Username** and **Password**.
4. Click **Save**.

Connect a Pod to a VLAN

In addition to handling the usual untagged Ethernet traffic on the default VLAN for the connected switch port, Solstice Pods can communicate using tagged traffic over the wired Ethernet interface on up to three additional VLANs.



A default VLAN for the physical switch port must be configured within the switch port's settings. This default VLAN should be configured as the primary Ethernet network in the Dashboard.

1. Click the checkbox **Enable VLAN 1**. This activates other fields.
2. In the **Network Name** field, enter the name of the network that users will see.
3. In the **Tag** field, enter the VLAN ID number.
4. If you wish to use Domain Name System (DNS) resolution and have added a DNS entry in your

DNS server to resolve to the Pod's IP address, you will be able to enter in the **DNS Hostname** (for example, hostname.domain) after this template is assigned to a Pod. The DNS Hostname for that Pod will show on the display's welcome screen instead of an IP address.



Note that the DNS Hostname is unique to each Pod, and can be added only after this template is applied to a Pod. You will need to enter this information for each Pod that uses this template.

5. If you wish to allow administrative access on this VLAN, select the **Allow admin configuration access** checkbox.
6. Select either **DHCP** for the Pod to be dynamically assigned an IP address, or select **Static IP** to enter your network configuration manually.
7. If you selected Static IP, enter appropriate information in the **Gateway**, **Network Prefix Length**, and **DNS 1** fields.



Note that the IP Address is unique to each Pod, and can be added only after this template is applied to a Pod. You will need to enter this information for each Pod that uses this template.

8. If attaching the Pod to additional VLANs, select the **Enabled** checkbox beside **VLAN 2** or **VLAN 3**, then repeat steps 2 through 7.
9. If using SDS, go to Manage > Templates > **Discovery** on the left sidebar and enter in the **SDS Host IP** address for each SDS server instance. For more information on SDS, see [Discovery Templates](#).



One SDS server instance is required per VLAN using SDS version 3.1 or later. The order of the SDS Host IP addresses entered does not matter.

10. Click **Save**.

Proxy Template

The Proxy template provides a method to configure Solstice displays deployed behind a secure web proxy to reach the licensing and over-the-air (OTA) update servers. Options to enable the web proxy for both http and https traffic are available.

The screenshot shows the 'Create New Proxy Template' form in the Solstice Cloud interface. The left sidebar contains navigation links: Home, Monitor, Analytics, Manage, Pods, Templates, Welcome Screen, Calendar, Features, Digital Signage, Message Center, Ethernet, Proxy, WiFi, Discovery, Security, Time/Locale, Advanced, Power Mgmt, Updates, Categories, and Active Learning. The main content area is titled 'Templates > Proxy' and features a blue 'Create New Proxy Template' button. Below this, the 'Default' template is shown with two columns for HTTP and HTTPS traffic. Each column has checkboxes to 'Enable web proxy for HTTP/HTTPS traffic', input fields for 'Proxy IP Address' and 'Proxy Port' (with a dropdown for port), 'Login Name', and 'Password', an 'Exclusion List' text area with a hint 'Use semicolons to separate entries', and a checkbox 'Don't use proxy for local addresses on same subnet'. 'CANCEL' and 'Save' buttons are at the top right of the form.

How To

Access This Page

1. From the Solstice Cloud Home page, in the left sidebar navigation panel, click **Manage > Templates > Proxy**.

Create New Proxy Template

1. Click **Create New Proxy Template**.
2. Enter the Template Name. For example, you could name the template by location (London Office) or descriptively (Mountain Theme).
3. Click **Save**.



You can also start by duplicating an existing template and making changes to it. Click on the three dots on the right side of the template you want to start with, and choose **Duplicate Template**.

Edit Proxy Settings (HTTP or HTTPS)

1. Select the **Enable web proxy for HTTP or HTTPS traffic** checkbox.
 2. In the **Proxy IP Address** field, enter the proxy server IP address.
 3. In the **Proxy Port** field, enter in the network port required to connect with your proxy server.
 4. In the **Login Name** and **Password** fields, enter in login credentials for your proxy server.
 5. If you wish to manually configure an exclusion list for the proxy server, enter in the IP addresses you wish to bypass the proxy server into the **Exclusion List** field. Multiple IP addresses can be added using semi-colons to separate the entries.
 6. If you need addresses on the same subnet as the Pod to bypass the proxy server, select the **Don't use proxy for local addresses on same subnet** checkbox.
-

WiFi Settings Template

Solstice is designed to leverage existing WiFi networks to support wireless collaboration in meeting rooms and learning spaces. The Solstice Pod supports secure access to two independent network interfaces: one for attaching the Pod to a network via Ethernet, and one to attach to a wireless network. Mersive recommends attaching the Pod to your main enterprise network via Ethernet for best performance, while the secondary wireless network can be utilized for guest access or a backup network.

This template is used to configure the wireless network. Within this template, there are two wireless options, but only one can be applied:

- **WAP (Wireless Access Point):** When in WAP mode, the Pod acts as a wireless access point, creating a local network on the Pod with no internet access that users can discover in their list of available networks, allowing them to connect directly to the Pod without needing an external network. Pods are shipped with WAP enabled by default for easy initial configuration. However, for performance reasons, Mersive highly recommends disabling WAP mode. This can be done by disabling WiFi altogether, or by applying the Existing Network option.
- **Existing Network:** This option connects the Pod to an existing network wirelessly. This is best utilized when there is no Ethernet jack in the room, or if you wish to connect a secondary guest network. If enabling WiFi, using the Existing Network option is strongly recommended.

The screenshot displays the Solstice Cloud management interface. On the left is a dark sidebar with navigation links: Home, Monitor, Analytics, Manage, Pods, Templates, Welcome Screen, Calendar, Features, Digital Signage, Message Center, Ethernet, Proxy, WiFi (highlighted), Discovery, Security, Time/Locale, Advanced, Power Mgmt, Updates, Categories, and Active Learning. The main content area is titled 'Templates > WiFi'. At the top of this area is a blue button labeled '+ Create New WiFi Template'. Below this is a configuration card titled 'Default' with 'CANCEL' and 'Save' buttons. The card contains the following settings: 'Enable WiFi' is checked; 'Allow admin configuration access' is checked with a 'Connect' link; 'WAP' is selected with a radio button, while 'Existing network' is unselected; 'SSID' is set to 'Unique To Pod' with a 'Hide SSID' checkbox; 'Security' shows 'Open' and 'WPA2' buttons; 'Frequency' shows '2.4 GHz' and '5 GHz' buttons; 'Channel' is set to '6' in a dropdown; and 'DNS Hostname' is set to 'Unique To Pod' in a text field.

How To

Access This Page

1. From the Solstice Cloud Home page, in the left sidebar navigation panel, click **Manage > Templates > WiFi**.
-

Create New WiFi Template

1. Click **Create New WiFi Template**.
 2. Enter the Template Name. For example, you could name the template by location (London Office) or descriptively (Mountain Theme).
 3. Click **Save**.
-

Edit WiFi Options

1. To connect the Pod to a wireless network, select the **Enable WiFi** checkbox.
 2. If you wish to allow admin access to make configuration changes on this network, select the **Allow admin configuration access** checkbox.
 3. Select one of the following radio buttons:
 - **WAP:** The Pod will act as a wireless access point. Proceed to step 4.
 - **Existing network:** This option connects the Pod to an existing network wirelessly. Proceed to step 5.
 4. If you selected **WAP**:
 - a. In the **SSID** field, enter in an easily identifiable name for the network. For example, you could name it the same as the Pod so that users can easily find it.
 - b. If you wish, you can select the **Hide SSID** checkbox. This prevents the network name from being displayed in a device's list of available networks.
 - c. Under **Security** select one of the following options:
 - **Open:** The WAP network will be open with no password protections to connect.
 - **WPA2:** Allows you to secure the network by creating a network password. When selected, a field to enter the **WPA2 Password** will appear.
 - d. Under **Frequency**, select either the 2.4 GHz or 5GHz wireless band.
 - e. Next select the wireless channel for the WAP network from the **Channel** drop-down.
 - f. The DNS Hostname is unique to each Pod. You will be able to enter this information after applying this template to a Pod.
-



You will need to enter a unique DNS Hostname for each Pod that uses this template.

g. Click **Save**. Skip the following steps.

5. If you selected **Existing Network**:

- a. Enter the network name in the **SSID** field.
- b. In the **Security Type** drop-down, choose the appropriate option: **Open**, **WEP**, **WPA/WPA2**, or **802.1x EAP**.



If you chose **802.1x EAP**, see the [Enable 802.1x Authentication](#) how-to below for more information on this configuration.

c. If prompted, enter the **Password** for this network.

6. Select either **DHCP** for the Pod to be dynamically assigned an IP address, or select **Static IP** to enter your network configuration manually.

7. If you selected Static IP, enter the **Gateway**, **Network Prefix Length** and **DNS 1** fields.



Note that the IP Address and DNS Hostname are unique to each Pod and need to be configured for every Pod. Once this template is applied to your Pods, you will be prompted to enter this information for the each Pod the template is applied to.

8. Click **Save**.

Enable 802.1x Authentication



You must ensure that the Pod has access to a timeserver so that it can validate the certificate.

1. Select the **Enable 802.1x** checkbox to see options appear.
2. Select the **EAP Method**: PEAP, TLS, or TTLS
 - a. For PEAP or TTLS methods:
 - From the **Phase 2 Authentication** drop-down, select one of the phase 2 authentication types: None, MSCHAPV2, or GTC.
 - Click the **Replace CA Certificate** button, then browse to and select the certificate.
 - b. For the TLS method:
 - Click the **Replace CA Certificate** button, then browse to and select the certificate.
 - Click the **Replace User Certificate** button, then browse to and select the certificate.



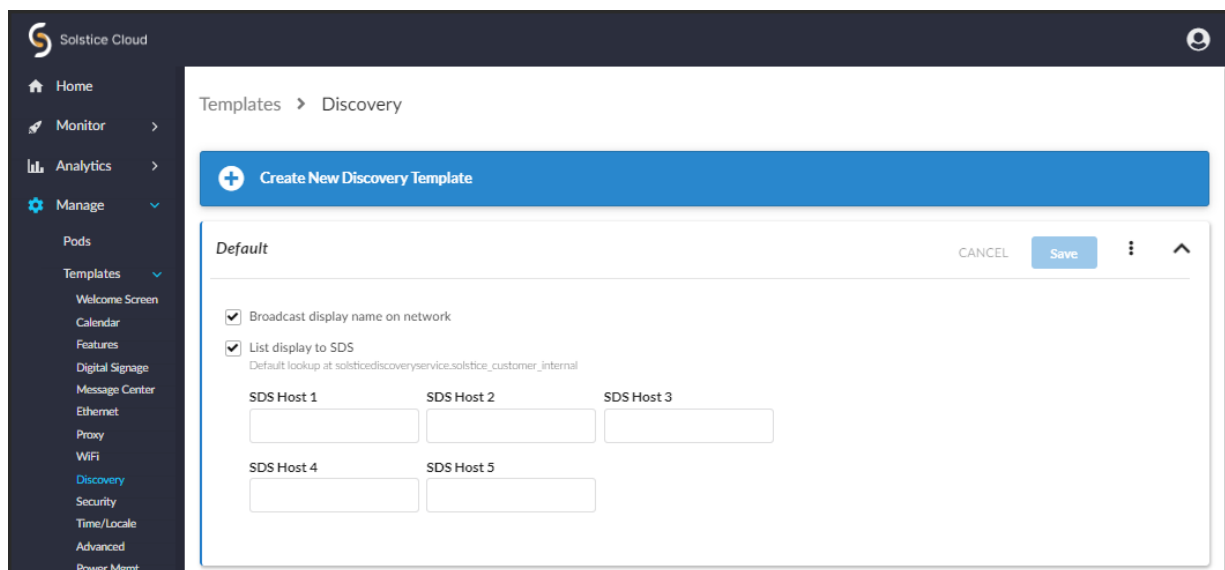
Supported certificate file types are .cer, .der, .pem, .crt, .pfx, and .p12.

3. If required, enter the **Username** and **Password**.
 4. Click **Save**.
-

Discovery Template

Display discovery refers to the ability for a user to "discover" what Solstice displays are available to connect to. A user may always connect to a Pod by typing the Pod's IP address into 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. This template allows you to configure the settings for two discovery methods that will enable this click-to-connect functionality: broadcast discovery or Solstice Discovery Service (SDS).

The Solstice Discovery Service (SDS) is an IT-friendly, non-broadcast mechanism that allows users to discover and click-to-connect to Solstice displays from their own devices to start sharing content. SDS makes connecting to a Solstice display fast and easy for users, especially those on networks that don't allow broadcast traffic. For more information on how to implement and configure SDS, see our 'Solstice Discovery Service (SDS) Guide'.



How To

Access This Page

1. From the Solstice Cloud Home page, in the left sidebar navigation panel, click **Manage** > **Templates** > **Discovery**.

Create New Discovery Template

1. Click **Create New Discovery Template**.

2. Enter the Template Name. For example, you could name the template by location (London Office) or descriptively (Mountain Theme).
3. Click **Save**.



You can also start by duplicating an existing template and making changes to it. Click on the three dots on the right side of the template you want to start with, and choose **Duplicate Template**.

Enable/Disable Broadcast Discovery

Broadcast discovery is only recommended for single network configurations that do not use a switch and that allow UDP broadcast traffic. If you do not wish for Solstice to utilize broadcast discovery, you can disable it in the Discovery template. However, Mersive strongly recommends utilizing Solstice Discovery Service (SDS) if broadcast discovery is disabled, to ensure that users will be able to find and connect to Solstice displays.

1. Enable or disable the **Broadcast display name on network** option.
2. Click **Save**.

Set the SDS Information to List the Display on SDS

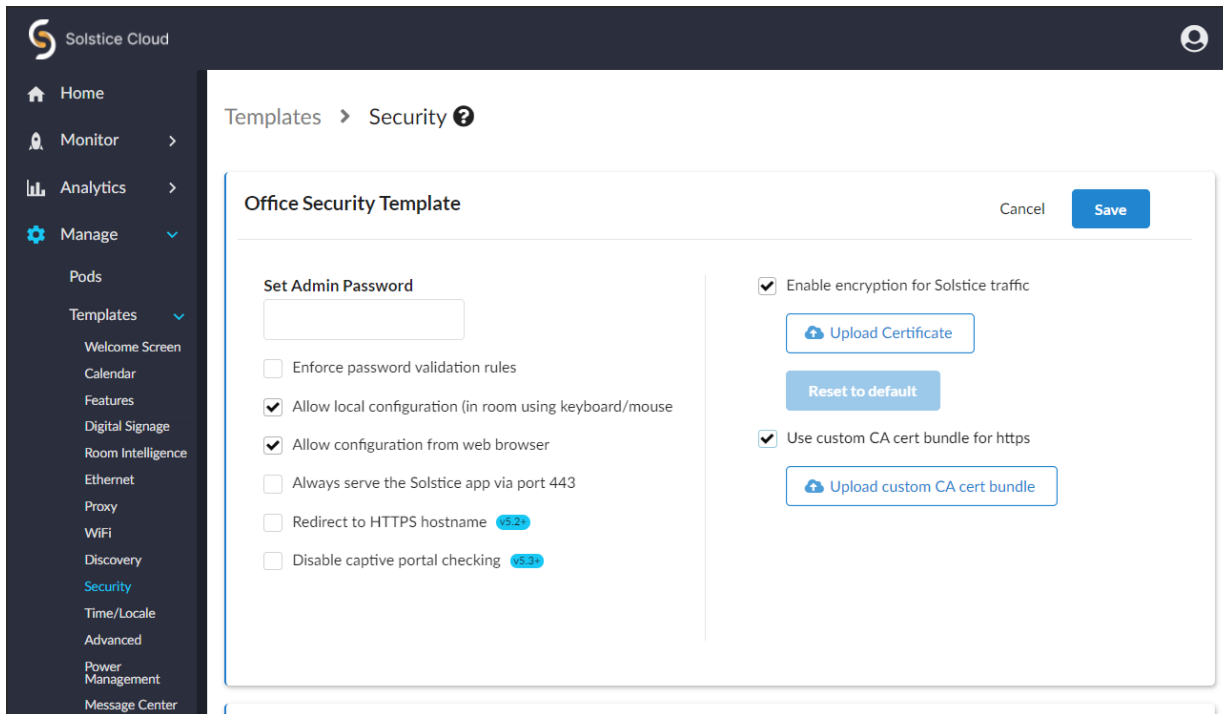
1. First, you will need to find the static IP address of the SDS host machine. To find this, open a Command Prompt window on the Windows host machine or Windows server that SDS is installed on. Type **ipconfig** then hit your Enter key. The IP address is listed in the results that appear.
2. In your Solstice Cloud Discovery template, select the **List display to SDS** option.
3. In the **SDS Host field**, enter the IP address of the SDS host machine.
4. Click **Save**.



If you have multiple instances of SDS, repeat the steps above for each instance.

Security Template

A Solstice Pod is a network-attached device that provides straightforward and secure wireless access to existing display infrastructure by leveraging a host IT network. By configuring your Pods according to these guidelines, users will be able to quickly connect and share content to the displays in Pod-enabled rooms while still maintaining network security standards. Pods that are not configured properly can be vulnerable to user and network security breaches, including unauthorized user access, screen capture and recording, unauthorized changes to configuration settings, and denial-of-service attacks.



How To

Access This Page

1. From the Solstice Cloud Home page, in the left sidebar navigation panel, click **Manage > Templates > Security**.

Create New Security Template

1. Click **Create New Security Template**.
2. Enter the **Template Name**. For example, you could name the template by location (London Office) or descriptively (High Security).

3. Click **Save**.



You can also start by duplicating an existing template and making changes to it. Click on the three dots on the right side of the template you want to start with, and choose **Duplicate Template**.

Password Protect Configurations

To protect Pod configurations, you can set an admin password that will be required in order to make any configuration changes. Once an admin password is set, you will be required to enter the password to change any configuration settings. This password will also be required to retrieve usage logs from your Pod or to perform a factory reset.

1. In the **Admin Password** field, enter in the password you wish to use to be able to change the Solstice display's configuration, or remove the password entirely.



Mersive highly recommends that you set the same administrator password for all of your Pods.

2. If you wish to enforce password validation rules (8-character minimum, one uppercase and one lowercase character, one number or special character), select the **Enforce password validation rules** option.
3. Click **Save**.

Enable/Disable Local Configurations

If you have chosen not to set an admin password to protect Pod configurations, you can still prevent users from making changes by disabling the ability for local configuration (in-room using a keyboard or mouse) or from a web browser. However, disabling both of these options means that you will only be able to configure the Pod using Solstice Cloud, which requires network connectivity.

1. To enable in-room configuration, select the **Allow local configuration** checkbox. To disable it, uncheck this box.
2. To enable configuration from a web browser, select the **Allow configuration from web browser** checkbox. To disable it, uncheck this box.
3. Click **Save**.

Serve Solstice Client/App via Port 443

This setting should only be used on unsecured networks where users may be subject to man-in-the-

middle redirects. Selecting this option requires additional clicks for the user to get started.

1. On the Manage Security Templates page, select the **Always serve the Solstice client via port 443** option.
2. Click **Save**.

Redirect to HTTPS Hostname

Solstice admins have the option to enable Solstice to redirect a user who enters the HTTP version of the Solstice host's IP address or DNS hostname (e.g. `http://111.22.3.44`) to the secure HTTPS DNS hostname (e.g. `https://hostname.domain`) when the Pod's certificate is validated by the web browser. This ensures that internal users have a secure connection to the Solstice QuickConnect page. This feature is available starting in Solstice 5.1.

1. Select the **Redirect to HTTPS hostname** checkbox to enable this functionality.
2. Click **Save**.



This feature requires that Solstice admins enter a valid DNS hostname in the Pod's network settings and have a valid client-to-server certificate on the Pod. To enter a Pod's DNS Hostname, go to Manage > Pods, click on the Pod's name, and update the **Ethernet** and/or **Wifi** sections (depending on your network configurations). Be sure to **Save** your changes in each section.

Disable Captive Portal Checking

Periodically, each Pod checks to see if it has access to the internet. However, if you want to eliminate this network traffic, you can disable these checks. This option is available starting in Solstice 5.3.

1. To disable these checks, select the **Disable Captive Portal Checking** checkbox.
2. Click **Save**.



To apply this setting to all your Pods at once, go to Manage > Pods and select the checkbox at the top of the first column. This will check all the Solstice Pods available to you in the list. Click **Settings** to display the **Security** column and select the Security template with captive portal checking disabled for any one of the selected Pods. You will be prompted to confirm the change on the number of selected Pods.

Enable Encryption for Solstice Traffic

This setting allows for the encryption of Solstice network traffic between the Pod and user devices using a standard RSA/SHA cipher with a 2048-bit private key. This also includes network traffic related to configuration via either the Solstice Dashboard or the Pod's web-based configuration (if enabled). When this option is enabled, the Solstice Dashboard will also send SLR updates via port 443.

By default, the Pod is loaded with a self-signed TLS certificate that is used when the Pod receives TLS connections. However, there is an option to upload a custom TLS certificate to be used instead. When this encryption option is disabled, the Pod will still use the TLS certificate for HTTPS traffic. For more information about certificate management in Solstice, see [Enterprise Certificate Management](#).

1. To turn on network encryption, select the **Enable encryption for Solstice traffic** checkbox.
2. If you wish to upload a custom TLS certificate to be used instead of the Pod's default self-signed certificate, click the **Upload Certificate** button, then browse to and select the certificate file.
3. Click **Save**.

Use a Custom CA Certificate Bundle for HTTPS

This option allows you to load a self-signed CA certificate bundle onto one or more Pods to be used for HTTPS communications and to validate the Pod's access to external data connections such as digital signage feeds, RSS feeds, and Solstice Cloud. This is especially important for networks that utilize a MITM proxy that intercepts HTTPS requests. The custom CA bundle is used in addition to the Pod's built-in CA certificates, which are suitable for most internet access.

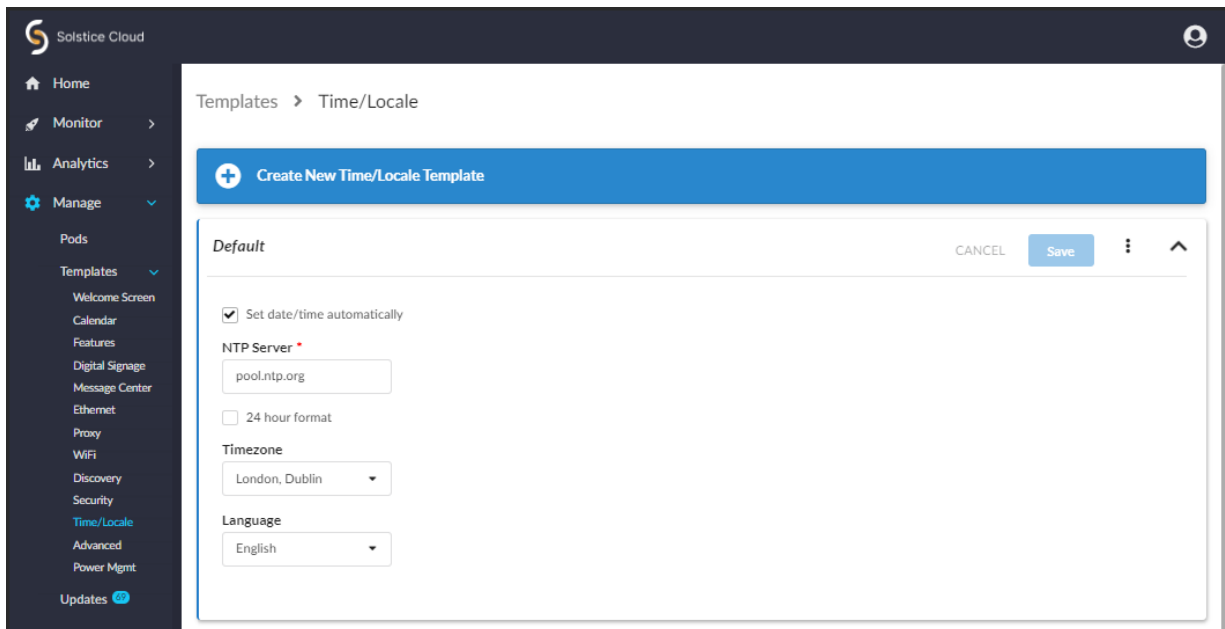


Solstice supports PFX and PEM certificate formats. Note that only PEM certificates with the .crt file extension are supported.

1. Select the **Use custom CA cert bundle for HTTPS** checkbox.
 2. Click **Upload custom CA cert bundle**.
 3. In the file explorer that opens, browse and select the CA certificate bundle, then click **Open**.
 4. Click **Save**.
-

Time/Locale Template

The Time/Locale Template page allows you to set various system preferences for your Solstice display, including timezone and language settings.



How To

Access This Page

1. From the Solstice Cloud Home page, in the left sidebar navigation panel, click **Manage > Templates > Time/Locale**.

Create a New Time/Locale Template

1. Click **Create New Time/Locale Template**.
2. Enter the **Template Name**. For example, you could name the template by specific location (London Office) or geographic area (Rocky Mountain).
3. Click **Save**.



You can also start by duplicating an existing template and making changes to it. Click on the three dots on the right side of the template you want to start with, and choose **Duplicate Template**.

Set the Pod's Date and Time Automatically

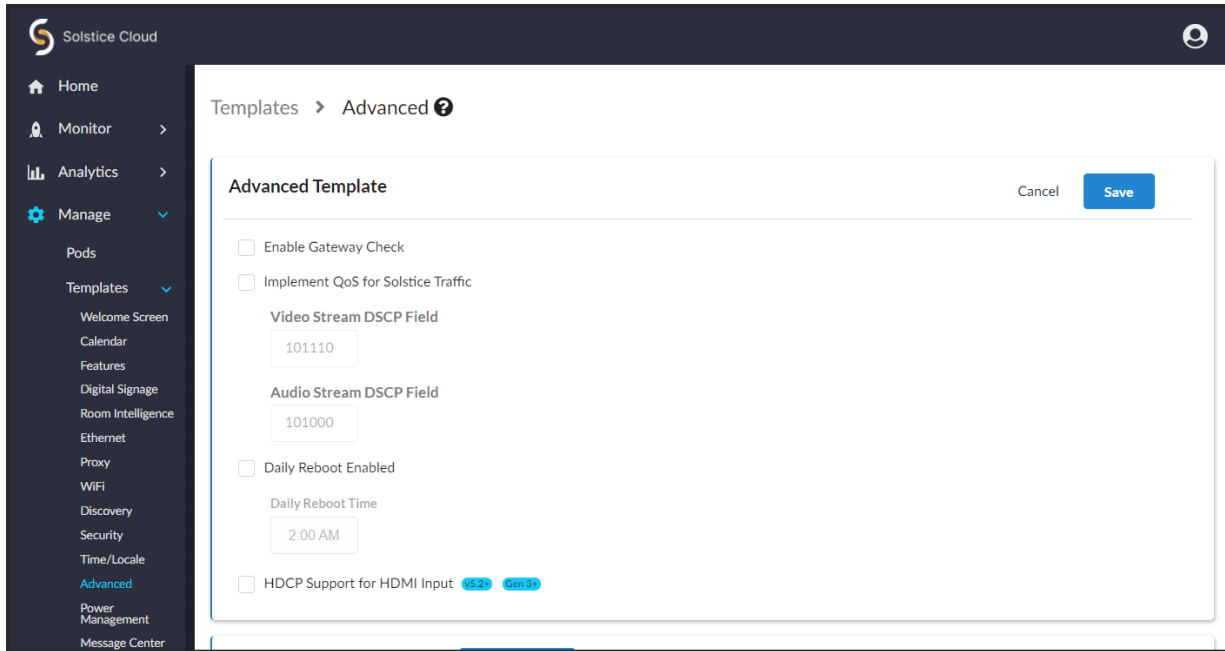
1. To set the date and time using a time server, enable the **Set date/time automatically** checkbox and enter the time server URL in the corresponding field (the default timeserver URL is pool.ntp.org).
 2. If you want the time to display in 24 hour format (4:00 pm is displayed as 16:00), select the **24 hour format** checkbox.
 3. From the **Timezone** drop-down, select the timezone the Pod is in (for example, Eastern Time).
 4. Click **Save**.
-

Change the Pod's Language Settings

1. Information is presented on Solstice Pod displays in English by default. To change this, use the **Language** menu below Timezone.
 2. Click the drop-down arrow and select the desired language from the list.
 3. Click **Save**.
-

Advanced Template

The Advanced Template gives you the ability to configure advanced settings, such as implementing quality of service to help prioritize Solstice traffic on your enterprise network, automatically rebooting Pods to maximize performance, and enabling HDCP support to play high resolution video.



The screenshot shows the Solstice Cloud interface. On the left is a dark sidebar with navigation links: Home, Monitor, Analytics, Manage (expanded), Pods, Templates (expanded), Welcome Screen, Calendar, Features, Digital Signage, Room Intelligence, Ethernet, Proxy, WiFi, Discovery, Security, Time/Locale, Advanced (highlighted), Power Management, and Message Center. The main content area is titled 'Templates > Advanced'. It contains a form titled 'Advanced Template' with a 'Cancel' button and a 'Save' button. The form includes the following settings: 'Enable Gateway Check' (checkbox), 'Implement QoS for Solstice Traffic' (checkbox), 'Video Stream DSCP Field' (text input with value '101110'), 'Audio Stream DSCP Field' (text input with value '101000'), 'Daily Reboot Enabled' (checkbox), 'Daily Reboot Time' (text input with value '2:00 AM'), and 'HDCP Support for HDMI Input' (checkbox) with two sub-options, 'v5.2b' and 'Gen3b', both of which are selected.

How To

Access This Page

1. From the Solstice Cloud Home page, in the left sidebar navigation panel, click **Manage > Templates > Advanced**.

Create New Advanced Template

1. Click **Create New Advanced Template**.
2. Enter the Template Name. For example, you could name the template by location (London Office) or descriptively (Mountain Theme).
3. Click **Save**.



You can also start by duplicating an existing template and making changes to it. Click on the three dots on the right side of the template you want to start with, and choose **Duplicate Template**.

Enable Gateway Check (Deprecated)

Previously, Pods assigned to a template where this setting was enabled would restart networking every ten minutes. However, this feature was deprecated and will no longer work as of Solstice 5.3.2. The setting will also be removed in an upcoming release.

Mersive recommends all customers disable this feature as soon as it is convenient to do so. To disable the Gateway Check:

1. Uncheck the **Enable Gateway Check** box.
2. Click **Save**.

Implement Quality of Service (QoS)

For enterprise networks that support differentiated network traffic via QoS, packet headers can be enabled to allow Solstice traffic to be differentiated and prioritized on the enterprise network by utilizing the IETF-defined quality of service (QoS) header information.



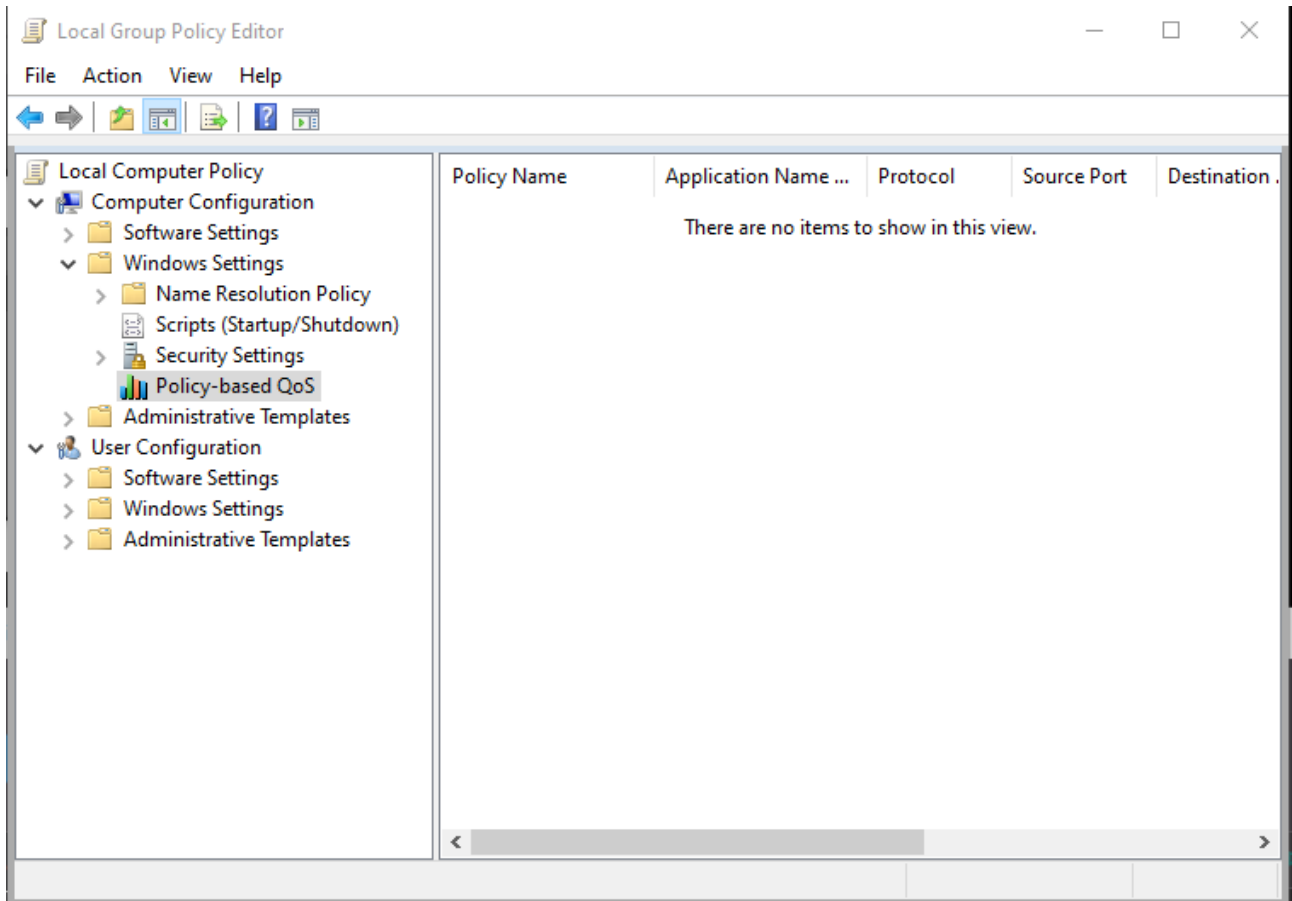
The Solstice Pod does not manage QoS traffic into or out of the Pod. It simply adds QoS tags to the packet headers, which allows routers on the network to better manage heavy network traffic. For example, when "Implement QoS for Solstice Traffic" is enabled on the Pod, by default, the Video Stream DSCP field is set to 101 110, which is "Expedited Forwarding" with a precedence value of 46. The Audio Stream DSCP field is set to 101 000, which is CS5 with a precedence value of 40. Packets with a lower precedence value might be dropped by QoS enabled routers on the network in favor of higher precedence packets.

1. Select the **Implement QoS for Solstice Traffic** checkbox.
2. In the corresponding fields that appear below, enter the 6-digit binary QoS video and audio stream bit settings. Mersive recommends you that use the DSCP Pool 1 Codepoints defined by the IETF.
3. Click **Save**.

Implement Quality of Service (QoS) for Solstice Client on Windows

Windows allows you to put QoS information into the packets being sent from the Solstice client by creating a local group policy on your computer.

1. On your Windows computer, press **Windows logo key + R**.
2. In the Local Group Policy Editor navigate to **Local Computer Policy | Computer Configuration | Policies | Windows Settings | Policy-based QoS**.



3. Right click **Policy-based QoS** and select **Create new policy**.
4. On the first page of the Create a QoS policy wizard, enter a name for this policy in the **Policy name** field.
5. With the **Specify DSCP Value** check box selected, enter a value of 46.
The precedence value of 46 corresponds to "Expedited Forwarding." However, you can enter other values defined in the DSCP Pool 1 Codepoints defined by the IETF.
6. Click **Next**.
7. Under **The QoS policy applies to** label, select the radio button for **Only applications with this executable name** and enter **SolsticeClient.exe**.
8. Click **Next**.
9. On the source and destination IP addresses page, click **Next**.

10. On the protocol and port numbers page, choose **TCP and UDP** from the drop down and then click **Finish**.

Packets from the Solstice client will now be tagged with QoS headers with a precedence value of 46.

| Schedule Daily Reboots

Enable and schedule daily Pod software reboots to refresh the Pod's memory usage and maximize system performance.

1. Select **Daily Reboot Enabled** to turn on and schedule daily reboots.
 2. In the **Daily Reboot Time** field, enter in the time you would like the Pods to restart each day.
 3. Click **Save**.
-

| Enable HDCP Support

On Solstice Gen3 Pods, the HDMI input is HDCP-compliant, which means a laptop or other device can connect to the HDMI-In port and pass digitally protected content through the Pod. HDCP support is disabled by default.

1. To enable HDCP support on Pods assigned to this template, select the **HDCP Support for HDMI Input** checkbox.
2. Click **Save**.



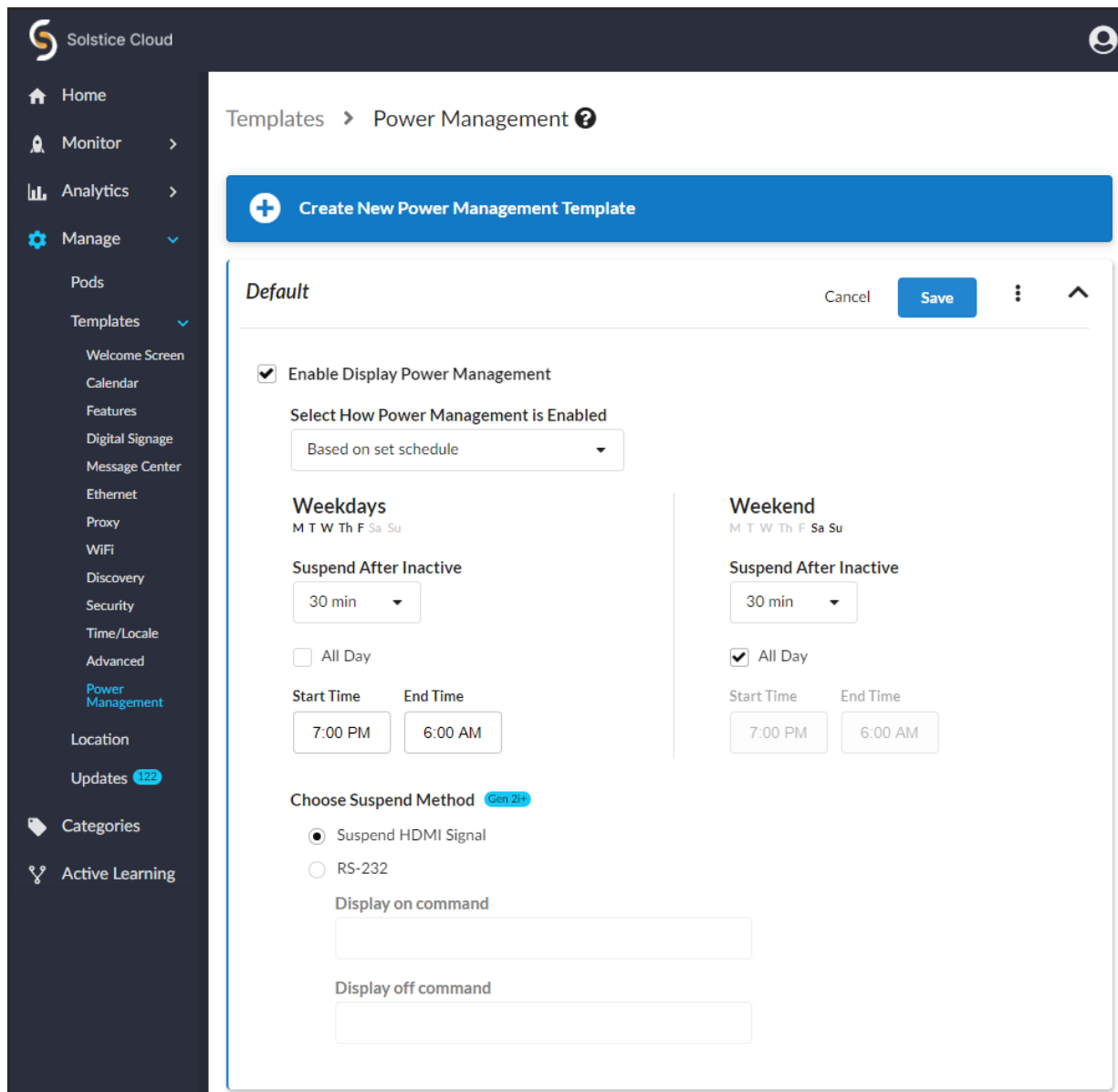
This feature is available for all Gen3 Pods (serial number MPOD8000A2xxxxxx or higher) on Solstice 5.2 or later.

Power Management Template

Power management templates allow you to schedule when a Pod's display monitor will turn off after being idle for the specified amount of time. Solstice can do this using one of two methods: suspending the HDMI signal being sent to the display, which allows the display monitors to use their own sleep settings, or by sending an RS-232 command to the display to turn off. The display will turn back on if any activity occurs. Power Management options are available for Gen2i and Gen3 Pods.



If a calendar integration has been enabled on the Pod, and a meeting is scheduled, the Pod will not suspend the display. Even if no one has connected to the Pod, and even if a Pod that is configured to detect room occupancy does not detect anyone in the room, the display will not be suspend until after the scheduled meeting has ended.



How To

Access This Page

1. From the Solstice Cloud Home page, in the left sidebar navigation panel, click **Templates > Power Management**.

Create a New Power Management Template

1. Click **Create New Power Management Template**.

2. Enter the **Template Name**. For example, you could name the template by location (London Office) or descriptively (Mountain Theme).
3. Click **Save**.



You can also start by duplicating an existing template and making changes to it. Click on the three dots on the right side of the template you want to start with, and choose **Duplicate Template**.

Schedule Display Power Management

1. To activate options, on the Power Management template select the **Enable Display Power Management** checkbox.
2. From the **Select How Power Management is Enabled** drop-down, select **Based on set schedule**.



Notice that there are separate settings for weekdays and weekends, although the same options are available for each. For either weekdays or weekends, use the following steps 1 and 2.

3. From the **Suspend After Inactive** drop-down, select the amount of time the Pod will be idle before the display is suspended. For example, you can select "10 Minutes" for the Pod to be suspended after 10 minutes of inactivity.
4. Select the hours during which this display power management setting will be active on Weekdays:
 - a. For this setting to be active all day, select the **All Day** checkbox. Mersive highly recommends only using this option on weekends.
 - b. For this setting to only be active during certain hours, deselect the **All Day** checkbox and enter in a **Start Time** and **End Time**. As a note, these fields use a 24-hour clock. Mersive highly recommends only scheduling during hours where no collaboration sessions will occur. For example, a corporate office could enter in a Start Time of 19:00 (7:00 pm) and an End Time of 06:00 (6:00 am).
5. Select the hours during which this display power management setting will be active on Weekends.
6. From the **Choose Suspend Method** options, select the method you wish to use to signal display monitors to turn off:

- **Suspend HDMI Signal** - The Solstice Pod will suspend the HDMI out signal, allowing the display monitors to use their own sleep settings.
- **RS-232** - The Solstice Pod will send the RS-232 commands you enter to the display monitor to turn it on and off.

7. If the RS-232 option was selected, enter in the RS-232 codes to turn your display monitor on and off in the corresponding fields that appear below. Solstice will use them to turn the display on or off. ASCII and HEX codes are both supported.



Administrators will need to know the specific RS-232 code for the control they are trying to pass. For details on those controls, please consult the user manual for the display.

8. Click **Save**.

Configure Room Occupancy-Based Power Management

Occupancy-based display power management allows Solstice to leverage its room occupancy detection capability to automatically sleep or wake the room display when employees enter and exit the meeting room. To enable this capability, you will first need to:

- Plug a supported USB camera into the Pod on Solstice version 5.1 or later
- Ensure occupancy data has been enabled for the Pod (Features template)

To enable display power management based on room occupancy:

1. From the Power Management template, select the **Enable Display Power Management** checkbox.
2. From the **Select How Power Management is Enabled** drop-down, select **Based on room occupancy**.
3. From the next drop-down, select the select the amount of time after the room is determined to be unoccupied before the display is suspended.



Mersive advises against using the Immediate option, as this could trigger the display to turn off if the camera is temporarily blocked. Occupancy is detected every 10 seconds, so there may be a delay before the display reawakens.

4. From the **Choose Suspend Method** options, select the method you wish to use to signal display monitors to turn off:

- **Suspend HDMI Signal** - The Solstice Pod will suspend the HDMI out signal, allowing the display monitors to use their own sleep settings.
- **RS-232** - The Solstice Pod will send the RS-232 commands you enter to the display monitor to turn it on and off.

5. If the RS-232 option was selected, enter in the RS-232 codes to turn your display monitor on and off in the corresponding fields that appear below. Solstice will use them to turn the display on or off. ASCII and HEX codes are both supported.



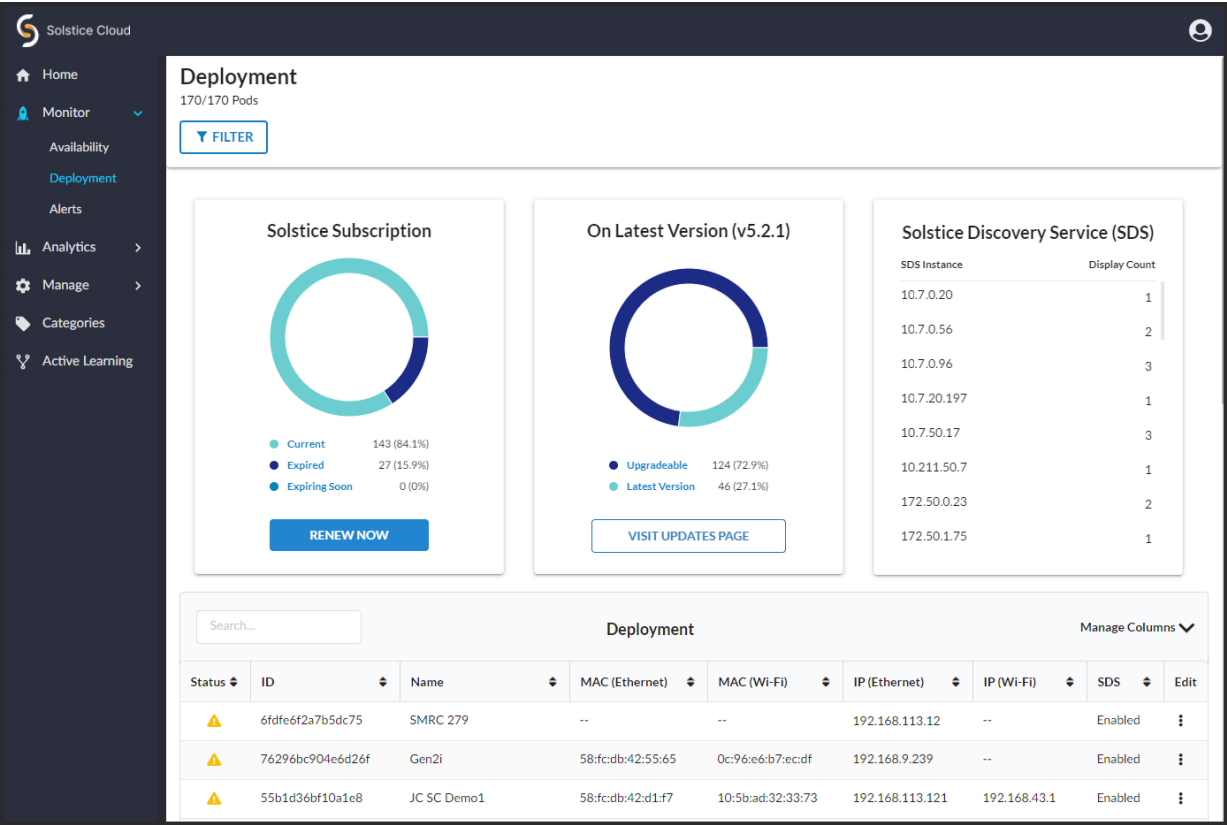
Administrators will need to know the specific RS-232 code for the control they are trying to pass. For details on those controls, please consult the user manual for the display.

6. Click **Save**.

Monitor Your Deployment

By monitoring your deployment, Solstice Cloud can alert you to any technical issues so they can be resolved before impacting meeting productivity. To help keep track of the status of large deployments, Solstice Cloud gives you a way to quickly identify which Pods have become offline so that any issues can be resolved. Email alert configurations allow you to set up email alerts that are triggered by events such as when a display is unreachable, or when a display is rebooted. These alerts allow you to passively keep tabs on your deployment to resolve issues before they impact your meetings.

Additionally, Solstice Cloud also allows you to quickly see which Pods in your deployment have an expired Solstice Subscription, and gives you the option to request subscription renewal within the portal to streamline the process.





How To

Quickly View Unavailable Pods

To view the status of your Solstice Pods at a glance, including whether they are available or unavailable:

1. In the left sidebar menu of the Solstice Cloud portal, go to either **Monitor > Deployment** or **Monitor > Availability**.

In both the Deployment and Availability tables, the unlabeled column furthest to the left displays status icons.



2. Click the  icon in the status column header row. Pods with similar status will be sorted together. A red dot  indicates the display is offline. If you mouse over an icon, a tool tip menu displays text about the status.

Renew Your Solstice Subscription

To view which of your Solstice Pods have lapsed subscriptions and quickly put together a request to renew them:

1. In the left sidebar menu of Solstice Cloud, go to either **Monitor > Deployment** or **Monitor > Availability**.

In both the Deployment and Availability tables, the unlabeled column furthest to the left displays status icons.

2. Click the  icon in the status column header row. Pods with similar status will be sorted together. A yellow triangle  indicates the subscription has lapsed.

3. Mouse over the yellow icon and click **Learn More** in the tip box that appears.

4. Click **Fix This**.

The Solstice Cloud Subscription wizard appears.

5. Click **Get Started**.

6. Select the Pods you wish to add to the subscription renewal quote, then click **Next**.

7. Select any additional Pods that are nearing the end of the subscriptions that you also want to renew and click **Next**.

8. Select the date you wish to extend the subscription to, then click **Next**.

9. Enter your contact information into the form that appears, then click **Next**.

10. To view the details of your subscription renewal quote request, click the **Details** drop-down.

11. To submit the request, click **Request a Quote**. A Mersive representative will be in contact with you shortly regarding your request.

12. Click **Back**.



Configure Automated Email Alerts

Solstice Cloud allows you to configure automated email alerts if certain events occur, such as a Pod

going offline. These alerts can be set to match the needs of your deployment and allow you to quickly detect and resolve issues.






You can set up email alerts to go to certain email addresses by assigning specific Pods to a category and then configuring email alerts for that category. For example, you could assign all the Pods at your Seattle headquarters to a category option for that location. Then you could configure an email alert to be sent to your Seattle-based IT administrator if there are technical issues with any of those Pods.

1. In the left sidebar menu of Solstice Cloud, go to **Monitor > Alerts**.
2. Under **Alert Settings**, toggle the email alerts you wish to receive to enabled. The toggle switch will turn blue when the alert is enabled.
3. To only receive email alerts for a select group of displays:
 - a. Click **filter**  next to the corresponding email alert. A list of your categories will appear as a dropdown menu.
 - b. Select the groups of displays you wish to be alerted for.
 - c. To remove selected alert display filters, click the  icon next to the filter option, or click **remove all**.

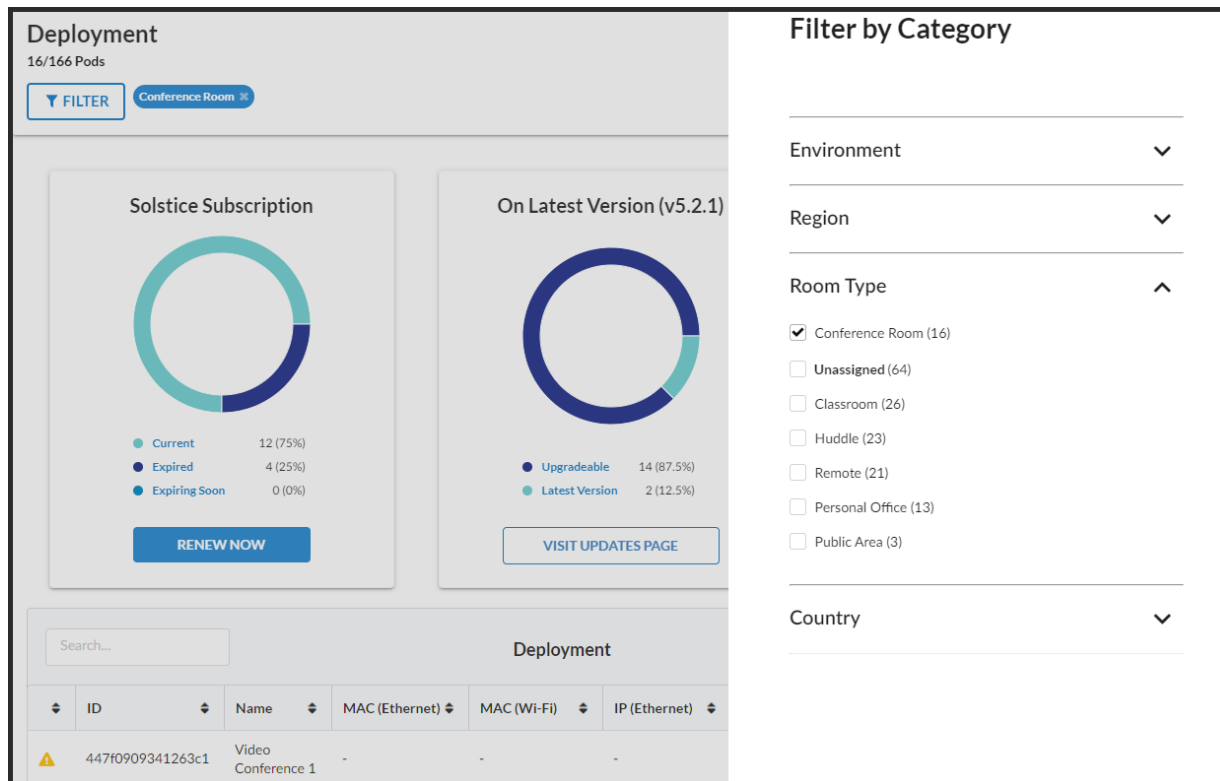
Filter Pods by Category

In both the Monitor > Deployment and Monitor > Availability tables (accessible from the left sidebar menu of Solstice Cloud), the list of Solstice Pods can be filtered by your available categories.

1. Click . A Filter by Category pane displays over the right side of the page.
2. Click the  icon for each category to reveal the available category options.
3. Select the options you want to filter for in each category.
4. Click the  icon to view the table with the selected filters applied.

The Filter by Category section lists all the categories that have been defined in Solstice Cloud. Clicking on any of the categories displays all the defined options for that category and indicates how many displays have that option set. When you select one or more options under that category, the table will display all Pods that belong to ANY of the selected options.

However, when you make selections in a second category, the table will only display Pods that belong to either option selected in the first category AND either option selected in the second category.



Export a CSV File of the Pods Table

In both the Monitor > Deployment and Monitor > Availability tables (accessible from the left sidebar menu of Solstice Cloud), the list of Solstice Pods can be filtered by your available categories.

Data will only be exported for Pods that currently match your search or filter criteria. This will include both the Pods displayed on the current page as well as Pods contained on additional pages that may not be currently displayed on the screen. For example, if your table is set to display 25 items per page, but there are 30 pods in the list, data for the five currently undisplayed pods will be exported. Additionally, only the columns that are currently displayed—that is, columns selected from the Manage Column check-boxes—will be exported.

When the table shows all the Pods and columns you want to export, click **Export to CSV**.

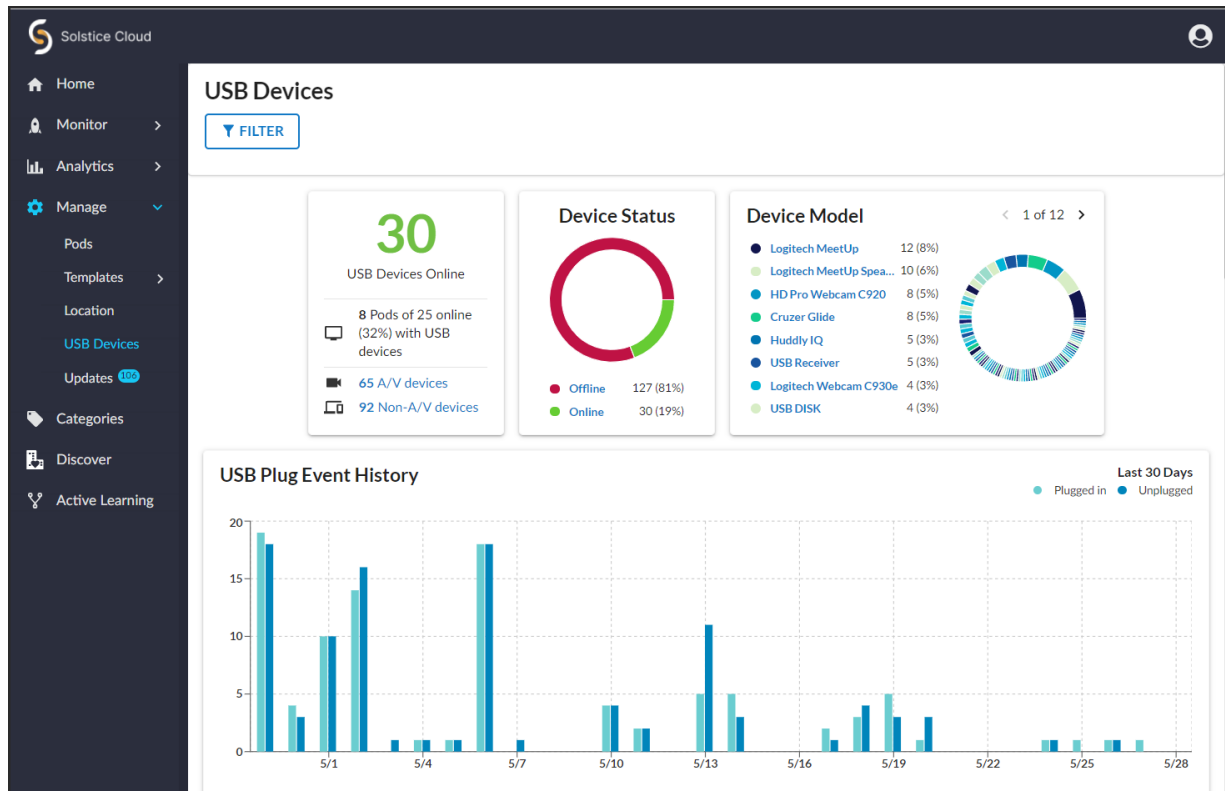
For example, to display all the data for all the Pods:

1. Clear all filters by clicking the  in any search fields or on any filter labels.
2. At the bottom of the screen, click **Export to CSV**.

Your browser should download the CSV file to its downloads directory.

View and Manage USB Devices

Solstice Cloud allows you to easily view which Pods in your deployment are connected to which kinds of USB devices, both audio/video devices and other devices, such as input and storage peripherals. Knowing which Pods have connected cameras allows you to then enable Solstice Conference and occupancy counting in the [Room Intelligence](#) options for those Pods. USB Devices data can be viewed in the initial deployment of this feature, and management functionality is coming soon.



USB Devices Summary Data

Solstice Cloud reports the number and type of USB devices connected to the Solstice Pods in your organization, both online and offline, as well as details about specific USB devices that have been used on Pods in your organization. The three boxes at the top of the USB Devices page contain summary data about USB devices connected to your Pods.


- **Online USB Devices** The summary box on the left reports the number and type of USB devices connected to Pods in your organization that are currently online. Solstice categorizes these devices into A/V (audio/video) and Non-A/V types.
- **USB Device Status** The circle chart in the Device Status box provides an at-a-glance summary of online/offline status for all USB devices that have been plugged into both online and offline Pods in your organization.





- **USB Device Models** The right-hand box summarizes the numbers of specific USB device models you have connected to your Pods, provided in both a list and a handy graph. This makes it easy to see which devices you have the most of in your Solstice deployment.

Below the USB devices summary information, the **USB Plug Event History** graph shows the number of the times USB devices have been plugged in to or unplugged from your organization's Pods each day for the last 30 days. Hover over the lines for a particular day to see exact plug-in/unplug event numbers.

USB Devices Table Details

The Devices table at the bottom of the USB Devices page provides more details about each of the USB devices that have been connected to the Solstice Pods in your organization, including each device's details, current status, and the readiness of the associated Pod for Solstice Conference and occupancy data functionality.

The USB Devices data can be sorted by the values in each column to find Pods and USB devices that meet various criteria by clicking the  icon in the column header. Possible sorts include:

- Alphabetically by the **Pod** name (default)
- Alphabetically by **USB Device** (groups similarly named USB devices together)
- By online/offline status in the **USB Status** column: A red dot  indicates the USB device is offline. Hovering over a red or green status dot displays the status in text format.
- By the date and time in the **Since** column, when the USB device was last plugged in to or unplugged from the Pod
- By whether the Pod connected to a USB device is **Conference Ready**: A green check  indicates all hardware, software, and configuration requirements for Solstice Conference functionality have been met. Hover over the **No**  status to see which Solstice Conference requirements have not yet been met.
- By whether the Pod connected to a USB device is **Occupancy Ready**: A green check  indicates the software and configuration requirements to report conference space occupancy data in the [Solstice Cloud Analytics](#) information have been met. Hover over the **No**  status to see which requirements for occupancy counting have not yet been met.



No camera data such as video or audio captures ever leave the Pod. All processing occurs locally and only the aggregated occupancy count is sent to your Solstice Cloud account.

How To



| Access This Page

To view available information about USB Devices connected to Solstice Pods in your organization:

1. Log in to [Solstice Cloud](#).
2. In the left sidebar menu, click to expand the **Manage** options.
3. Select **USB Devices**.




Filter for A/V or Non-A/V Devices

The USB Device data provided in Solstice Cloud can be filtered by type of USB device, either audio/video (A/V) or non-A/V devices, such as input and storage peripherals.

1. In the left summary box that lists the number of USB Devices Online, click one of the two links at the bottom that list the number of **A/V devices** or **Non-A/V devices**.
2. A button for the selected filter appears under the page title, to the right of . The summary boxes at the top of the page and the table at the bottom of the page now show only USB devices that match the selected type.
3. Click  in the filter button to clear a selected filter and display more general USB devices data.

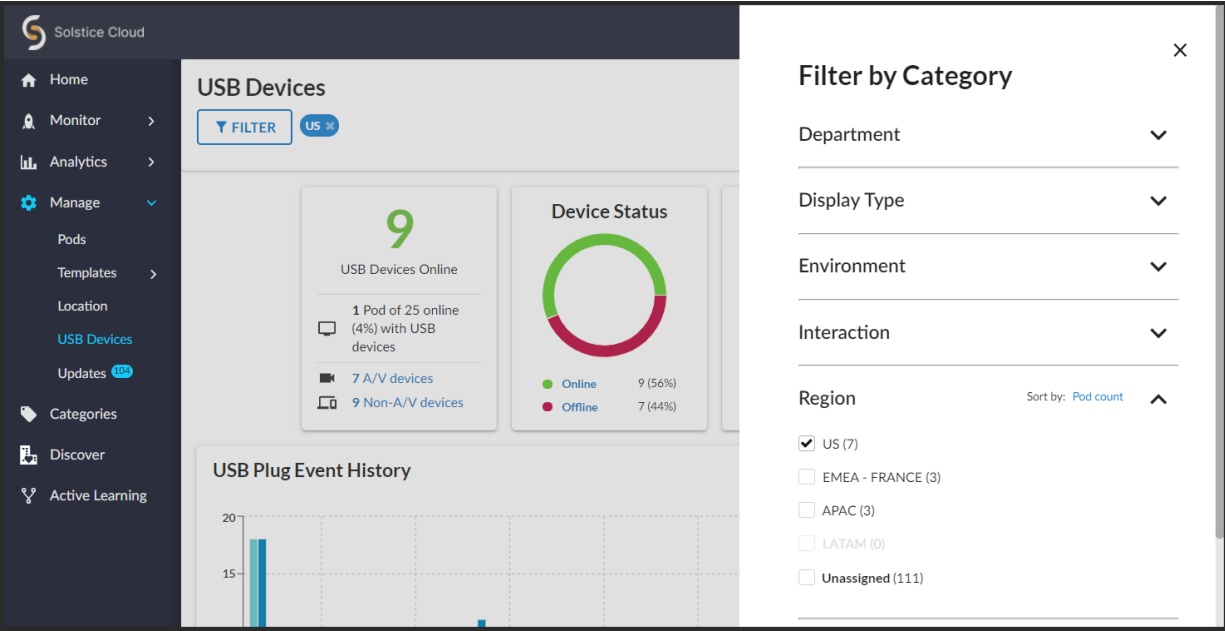
Filter USB Devices by Pod Categories

USB Device data can also be filtered by any category defined for Solstice Pods in your organization. The information in the summary boxes at the top of the USB Devices page and the table at the bottom of the page will be restricted to only USB devices that match the selected category options.

1. Click . A Filter by Category pane displays over the right side of the page.
2. Click the  icon for each category to reveal the available category options.
3. Select the options you want to filter for in each category.
4. Click the  icon to view the table with the selected filters applied.

The Filter by Category section lists all the categories that have been defined in Solstice Cloud. Clicking on any of the categories displays all the defined options for that category and indicates how many displays have that option set. When you select one or more options under that category, the table will display all Pods that belong to ANY of the selected options.

However, when you make selections in a second category, the table will only display Pods that belong to either option selected in the first category AND either option selected in the second category.



Schedule Software Updates Using Solstice Cloud

For Mersive customers with large deployments, [Solstice Cloud](#) makes Solstice Pod software updates faster, easier, and less disruptive by allowing admins to schedule over-the-air updates during off hours. Solstice Cloud streamlines the update process by allowing targeted updates based on categories, auto-retry after network interruptions, and email reports confirming completion. Along with the ability to schedule updates, administrators can choose to start a software update immediately as well.

One of the advantages of Solstice Cloud is the ability to assign Pods to categories. Assigning your Pods to categories allows administrators to easily identify and select which Pods they may want to batch update. For example, an administrator can schedule Pods at their London office to update at a different date and time than their New York office. Please note that scheduled updates will begin according to each Pod's local time.



For software updates to work, Pods must have active [Solstice Subscription](#). You also may need to make a firewall exception for <https://www.mersive.com> so Pods can access Mersive's upgrade server to retrieve the upgrade file.

For updates that are scheduled in advance, you can opt-in to be notified via email when the update is completed. Scheduled updates can be edited or deleted up until the point that the upgrade process begins. Once an update is in progress, it cannot be paused or canceled. If an error occurs with a Pod update, Solstice Cloud will flag the update task with a warning. If internet connectivity is interrupted during the update process, Solstice Cloud will retry and resume the update where it left off.

| Watch How-to Video

How To

| Update Pods' Software Version Now

1. In the left sidebar menu of the Solstice Cloud portal, go to **Manage > Updates**.
2. Select the Pods you want to be upgraded.



If you don't see a Pod in the list, it may already be a part of a scheduled task.

3. Click **Update Pods**.

4. In the pop-up that appears, use the drop-down to select which software version you would like to update the Pod to.
5. Click **Update Now**. A pop-up appears warning you that once that update process begins, it cannot be canceled.
6. To proceed with the update, click **Update Now**. You are returned to the Tasks tab where you can view the progress of the update.

Schedule Pods to Update Later

1. In the left sidebar menu of the Solstice Cloud portal, go to **Manage > Updates**.
2. Select the Pods you want to be upgraded.



If you don't see a Pod in the list, it may already be a part of a scheduled task.

3. Click **Update Pods**.
4. In the pop-up that appears, use the drop-down to select which software version you would like to update the Pod to.
5. Click **Schedule for Later**.
6. Select the date and time you wish to schedule the Pods to update.



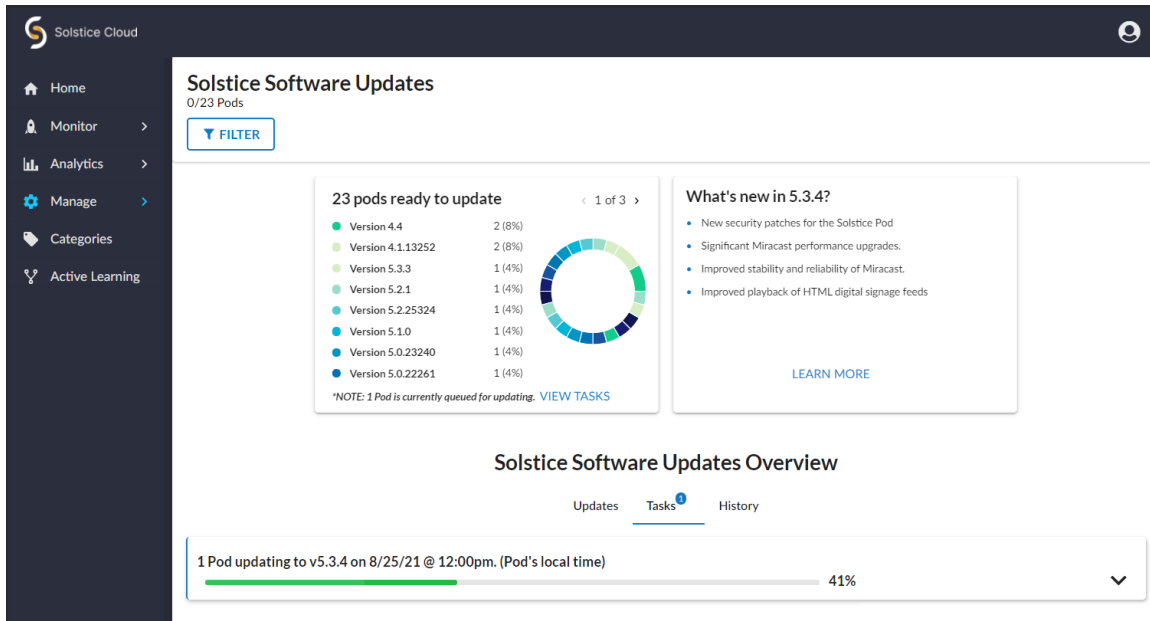
The update will occur based on the local time set in the Pod's system settings.

7. If you wish to, you can select the option to get an email notification when the update is complete.
8. Click **Schedule**. The Pod software update is now scheduled.
9. To view, edit, or delete your scheduled updates, click on the **Tasks** tab.

View In Progress and Scheduled Tasks

1. In the left sidebar menu of the Solstice Cloud portal, go to **Manage > Updates**.


2. In the Solstice Software Updates Overview section, go to the **Tasks** tab.



3. On this tab, you can view all in progress and scheduled software updates. Scheduled updates can be edited up until the update begins. Once an update is in progress, it cannot be paused or canceled.

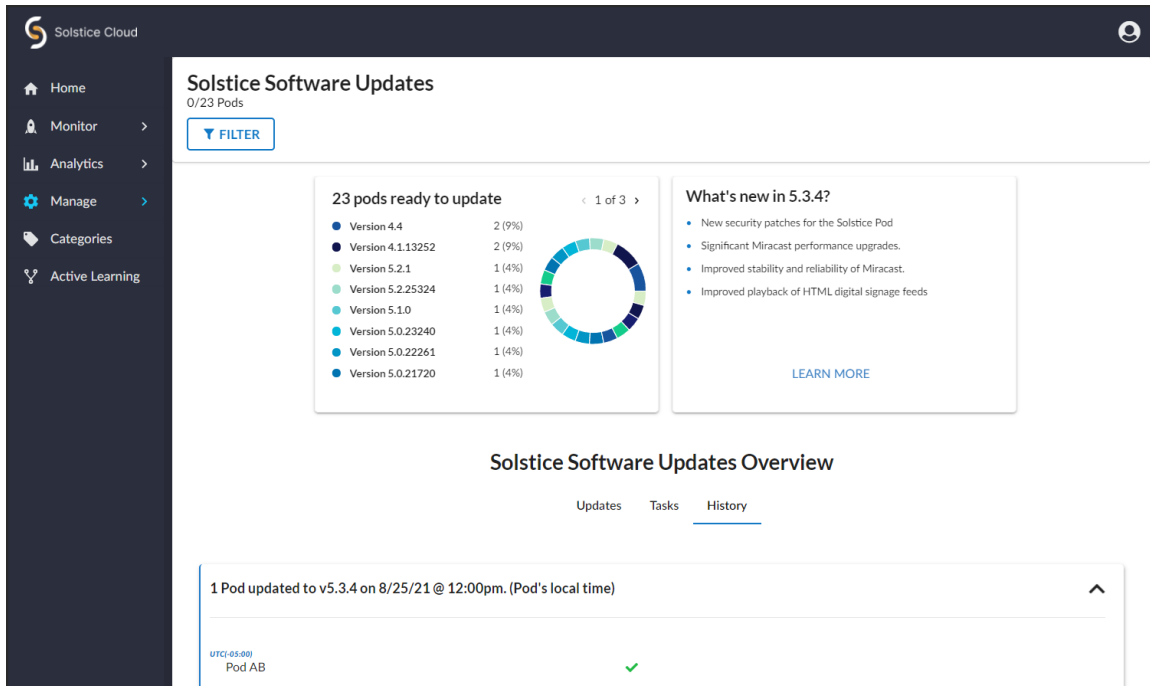
Edit a Scheduled Update


You can edit or delete a scheduled task up until the point that the update process starts. Currently, you cannot add or remove Pods from a scheduled update. If you need to change which Pods are a part of a scheduled update, you will need to delete the scheduled task and reschedule it with the correct Pods.

1. In the left sidebar menu of the Solstice Cloud portal, go to **Manage > Updates**.
2. In the Solstice Software Updates Overview section, go to the **Tasks** tab.
3. You can view the Pods being updated in that scheduled task by clicking the down arrow to the right of the task.
4. Next to the scheduled task, click **Edit**.
5. In the fields that appear, you can adjust the date and time for the scheduled update.
6. Click **Save**.
7. To delete the scheduled update, click the **Delete**  icon, then click **Delete** in the pop-up that appears. A notification that your task was deleted momentarily appears.

View Update History

1. In the left sidebar menu of the Solstice Cloud portal, go to **Manage > Updates**.
2. In the Solstice Software Updates Overview section, go to the **History** tab.

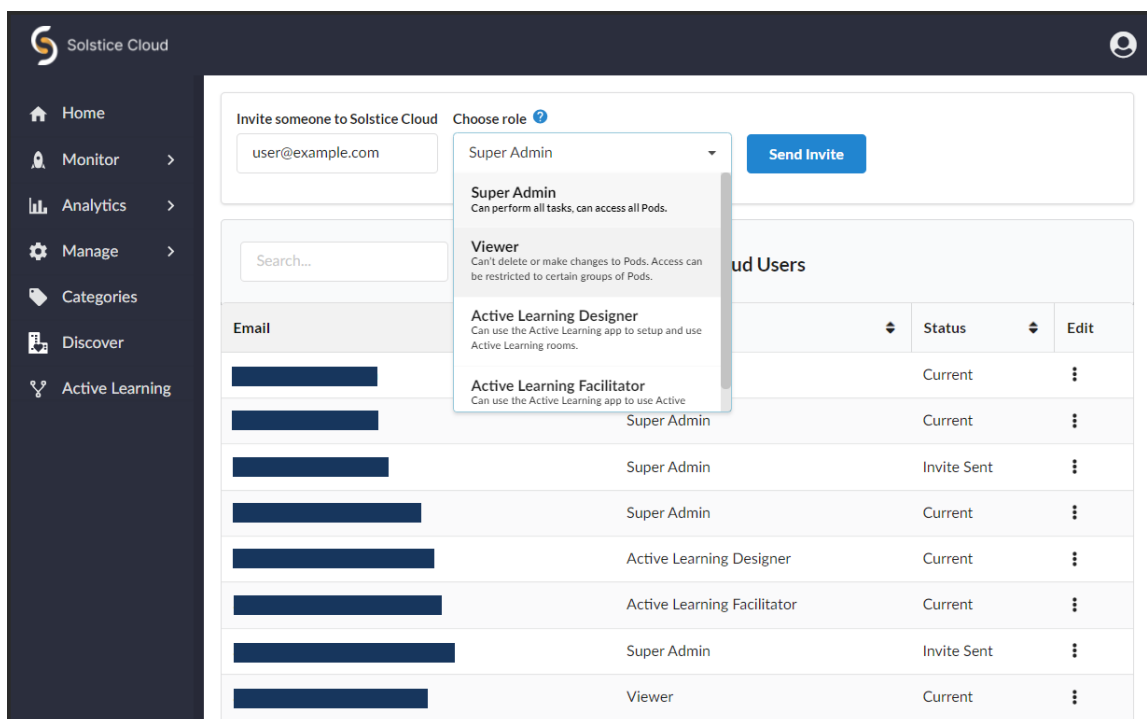


3. On this tab, you can view the history of completed update tasks. Click on an item row to view the details of the software update.
4. If an error occurred during the software update, a warning icon  will appear next to the completed task. If a Pod's software update failed, the Pod will appear back in the Updates tab as ready to update. You can then choose to update that Pod, or reschedule it to update at a later time.

Roles and Permissions

Solstice Cloud provides the ability to assign a role to each user account to determine the level of access and permissions each admin or user has. You will only be able to add or edit user accounts that are at or below the level of permission your own account has. The following roles and permissions are available to assign to users in your organization.

- **Super Admin:** Can perform all tasks and make changes to all Pods. This is best used for users that administrate the entire Pod deployment.
- **Viewer:** Can view analytics or monitor the deployment but cannot delete or make changes to Pods. Access can also be restricted to certain groups of Pods.
- **Active Learning Designer:** Can use the Solstice Active Learning app to virtually design and set up the active learning rooms. Designers are also able to conduct active learning sessions and route video and content in the active learning room.
- **Active Learning Facilitator:** Can use the Active Learning app to conduct active learning sessions and route video and content in the active learning room.





How To

Invite Users and Assign User Roles



1. In the Solstice Cloud portal, click the **User**  icon in the top-right corner, then click **Account**.

2. In the **Invite someone to Solstice Cloud** field, enter in the email address of the user you would like to invite to access your organization's Solstice Cloud account.
 3. From the **Choose a Role** drop-down, select the role and corresponding permissions you would like to apply to the user. As a note, a user's role can be changed later.
 4. Click **Send Invite**. Solstice Cloud will then send an email invite with a link to create an account to the email address provided.
-

| Edit a User's Role

1. Log into your Solstice Cloud account.
 2. Click the **User**  icon in the top-right corner, then click **Account**.
 3. In the **Edit** column of the Current Solstice Cloud Users table, click the vertical ellipsis  icon.
 4. Click **Role**, then select the new role you would like to apply to the user account. The role change is automatically saved.
-

| Delete User Account

1. Log into your Solstice Cloud account.
 2. Click the **User**  icon in the top-right corner, then click **Account**.
 3. In the **Edit** column of the Current Solstice Cloud Users table, click the vertical ellipsis  icon.
 4. Click **Delete User**. A prompt appears to confirm you want to delete the account.
 5. Click **Delete**. The user account is deleted.
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