SYMPHONY

User Guide

Version 5

Updated: April 4, 2022

Notices

Contents

Chapter 1

Introduction

This guide describes how Symphony users can:

- Manage and moderate meetings.
- Monitor devices.
- Set alerts, adjust triggers, and work tickets.
- Provision users and devices.
- Create reports using the Symphony platform.

Intended Audience

This guide is intended for all Symphony customers who Administer or use Symphony in their organization.

References

For additional resources related to the Symphony platform, refer to the [AVI-SPL Symphony user documentation web page](#).

Need Help?

For additional help contact our Global Help Desk:

- Call 866-588-6857, Option 3 (00800 7008 0044 in EMEA)
- Send an email to avispl-support@avispl.com.
- [Submit a Help Desk ticket](#).
- To submit a request for a product to be added to the Service Catalog, contact readiness-vms@avispl.com.

We are available 24/7/365.

Chapter 2

Overview

Symphony provides automated meeting scheduling, launching, monitoring, and analytics from a single platform providing global control of all Audio Video (AV) and Unified Communications (UC) devices in multiple locations across the organization.

Symphony offers these services:

- Managed Services powered by Symphony (MSPBSY)
- Symphony as a Service (SYaaS)
- Symphony On Premises (SYOP)

Managed Services Powered by Symphony (MSPBSY)

AVI-SPL provides comprehensive remote, proactive monitoring and management of your video conferencing environment, including infrastructure and endpoints. AVI-SPL's Managed Services Powered by Symphony provides all Symphony provisioning, configuration, and support to your company.

Symphony as a Service (SYAAS)

Symphony as a Service (SYaaS) provides access to the Symphony cloud while benefiting from the capabilities of the Symphony platform. The Symphony platform provides the ability to monitor and support AV, UC, and collaboration systems.

User profiles can be created to provide all or just some of the following functionality:

- Manage, moderate, produce and administer meetings.
- Manage, configure, and provision Locations, Rooms, Devices and Users at the account level.
- Manage, monitor, and generate tickets. Administrators can configure custom monitoring triggers and other items that automatically generate tickets.

Symphony on Premises (SYOP)

Symphony is deployed at the customer site. No component communication is conducted outside of the customer's premises.

Chapter 3

Getting Started

All features and functions are based on the individual's Symphony account services and permissions.

System Requirements

The Symphony portal can be accessed from any operating system that supports any major browser. It is recommended that the browser of choice be updated to the latest stable version.

Third Party Software Compatibility

Symphony is certified with third-party software. This certification includes any current and future third-party patches; no other certification is necessary.

AVI-SPL supports all third-party software's recommended patches on the already certified version of the third-party software. For example: Symphony 5.0 is certified with Tomcat 9.0.20. AVI-SPL supports all Apache-recommended Tomcat patches for Release 5.0 if the release number does not change.

The following indicates the supported third-party software and Operating Systems used by Symphony.

Symphony Portal

Purpose	Third-Party Software	Required Version	License	License URL
Application Server	Apache Tomcat	9.0.20	Apache License v2.0	http://www.apache.org/licenses/LICENSE-2.0
Business Analytics	Logi Analytics	6.5		
Container	Docker			
Database	PostgreSQL	9.4.14	PostgreSQL License	https://www.postgresql.org/about/licence/
Data Warehouse	Greenplum Database	5.15.1	Apache License v2.0	http://www.apache.org/licenses/LICENSE-2.0
Java VM	Open JDK	14.0.x	GPLv2	
Operating System Cloud	CentOS	6.10	GPLv2	https://www.centos.org/legal/licensing-policy

Purpose	Third-Party Software	Required Version	License	License URL
Ticket Management	ServiceNow	Quebec		

Symphony Cloud Connector

Purpose	Third-Party Software	Required Version	License	License URL
Application Server	Apache Tomcat	9.0.20	Apache License v2.0	http://www.apache.org/licenses/LICENSE-2.0
Container	Docker			
Database	PostgreSQL	9.4.x	PostgreSQL License	https://www.postgresql.org/about/licence/
Java VM	Oracle Java SE JDK	8u212	Oracle Binary Code License	http://www.oracle.com/technetwork/java/javase/terms/license
Operating System	CentOS	6.5	GPLv3	https://www.centos.org/legal/licensing-policy
Operating System	Windows	10		

The Cloud Connector can be upgraded or restarted from within Symphony. These options are available on the device's Live Monitoring of extended properties page.

Opening Symphony

The same portal is used for both Symphony Users and Administrators.

1. Navigate to the Symphony portal URL in any supported web browser.
2. In the **Username** field, enter your email address.
3. In the **Password** field, enter your Symphony password.

Chapter 4

Customizing the User Interface

Administrator and User Views

Symphony supports the following User Interface (UI) views.
By default, the view displayed is based on the assigned permissions.

View	Description
User	Allows users to view the meeting calendar, access meeting recordings and meeting endpoints.
Administrator	Allows users to view additional features using the Symphony UI. The Administrator view in Symphony shows all details for your specific company account. This view shows meetings, devices, tickets, and reports.

Switching Views

To change from the Admin to User view,

▪ In the top-right corner of the portal, select the 👤 icon and select **User View**.

To change from the User to Admin view,

▪ In the top-right corner of the portal, select the 👤 icon and select **Admin View**.

Setting Account Preferences

User preferences can be personalized for each user.

1. In the top-right corner of the portal, select the 👤 icon and select **Preferences**.
   The **Preferences** window is displayed.
2. Select a tab and update fields on each tab:

Tab	Description
Profile	This tab includes settings for the user's contact information, Billing code, Supervisor's contact information, system of measurements, and preferred language.

Tab	Description
	Set the **Preferred System of Measurement** to **Imperial** or **Metric**. Imperial is the U.S. standard of measurement that includes lbs. and miles. Metric is the internationally known standard that includes kgs and kms. These measurements are used in the Analytic dashboards when calculating and displaying measurements. For more information, see [Analytics](#).
Conferencing	This tab includes the user's Moderation code and, if applicable, the user's personal audio-conferencing codes and PIN.
Customize	This tab includes available color schemes to select as the default view displayed for the Symphony portal. The selected color scheme is automatically applied to all future sessions, unless changed.

3. Select **Save**.

Chapter 5

Navigation

The left navigation pane displays the available modules within Symphony to view and configure the features available:

Option	Description
Dashboard	The Dashboard displays the Meeting Maestro view and depending on permissions, Rooms, Devices, and Tickets.
	You can view, moderate, monitor, and perform various meeting functions for upcoming and Live meetings via the Meeting Maestro. The data displayed can be changed using filters.
	Additional information regarding Rooms, Devices, and Tickets can be found by drilling down on the icons in those sections. For more information, see Viewing Rooms and Devices and Viewing Tickets.
Meetings	Meeting details are managed on this page. This page includes meeting information such as start and end times, current meeting status, and location.
	On this page, meeting can be managed and displayed in a List, Map, or Calendar view. The meetings displayed can be limited by applying filters.
Devices	Device details and statistics are managed on this page, based on whether the room is managed or not. Devices can be displayed in a List or Map view.
	The **Browse** option displays devices by Country, Location, and Rooms while including all associated tickets.
	The display can be filtered to show only specific devices, such as those that are offline or those with an error.
Alarms	All tickets and alerts are displayed on this page.
	Tickets indicate an issue and can be generated automatically or can be manually entered for problematic meetings and devices.
	The display can be filtered to show only specific tickets, such as those that are open or critical.
Administration	The following are displayed and managed on this page:
	• **Users** contains user details and enables you to change passwords, set Registration options, and send Welcome emails.
	• **Locations** contains location details and related country, rooms, and devices.
	• **Rooms** contains room details and related locations and devices.
	• **Devices** contains device details and related locations and rooms.
	• **Configuration** contains account configuration specifics.
Analytics	Symphony offers a Business Intelligence (BI) module to obtain various analytics and provides reporting tools to understand how the business utilizes Symphony.
Reports	All table reports for an account can be generated using this feature.

Option	Description
	The **Build Your Own** option allows users to create custom reports and view tabular data. Reports can be saved for future use. For more information, see the Build Your Own Reports section.
Ticket Overview	The total number of open tickets, by the following types, is displayed here, in real time, for quick reference: • Critical • Major • Minor Details cannot be accessed from this section. For more detailed information about the tickets, see Viewing Tickets.
Live Meetings	The total number of live meetings and calls currently taking place is displayed, in real time, for quick reference.
Schedule Meeting	Meetings, including conferencing and advanced scheduling options are scheduled on this page. If a user has **can produce meetings** permissions, scheduling request information can be entered on the **Producer** tab. For more information, see Producing Meetings.

Searching in Symphony

The Symphony search feature provides users with multiple methods of searching for items in Symphony.

1. In the top right corner of any page, select the $\boxed{Q}$ icon.

    The **Search** pane is displayed.

2. Select a tab to specify a category to search for. The tabs displayed are based on the assigned user permissions. Options include:

Tab	Search Category
	Device Search
	User Search
	Meeting Search
	Ticket Search

> **TIP** By default, the tab displayed corresponds to the selection made in the left navigation pane. For instance, if **Devices** > **List View** is selected in the navigation pane, then the **Device Search** tab is displayed.

3. On the selected tab, enter the search criteria.

4. To search by specific fields and/or date ranges, select **more options** and complete additional fields, as needed.

5. Select **Search**.

   The **Results** page displays data that matches the search criteria.

> **TIP**
> - To sort columns, select the ⬍ arrows in the column header.
> - To drill down on an item, select the ⋮ icon, if applicable.
> - To hide the Search tabs, select the 🔍 icon.

6. Repeat to perform additional searches, if needed.

   Additional search results are displayed on individual tabs on the **Results** page.

Searching for Room Schedules in a Calendar View

Search all scheduled meetings for a specific room and display the schedule in a Calendar View. This feature is helpful for understanding room reservations and scheduling room maintenance.

1. In the upper-right of any page, select the 🔍 icon.

   The **Meeting Search** pane is displayed.

2. Select **more options** and select **Room**.

3. Enter the room name.

4. Select **Search**.

5. On the toolbar, select the 📅 icon.

   A calendar for the specified room is displayed.

Chapter 6

Dashboard

The Dashboard provides a high-level visual representation of all devices, rooms, meetings, and tickets. It displays three sections:

- Meetings Maestro
- Rooms & Devices
- Tickets

Although a high-level view is presented on the **Dashboard**, items can be selected to display additional details and take further action.

Using Meetings Maestro

To view the **Meetings Maestro** page, the **Meeting** component must be set to **View Only** or **Full Access** for the user.

The Meetings Maestro displays a list of meetings that are in progress, also referred to as live meetings, and those scheduled to start today. All meetings on this page can be managed directly from here or in the Meetings section.

> **TIP** Meetings that are named **AdHoc Conference:** *location*, are Ad Hoc meetings. Ad Hoc meetings are automatically generated by Symphony when a device is manually in use, so the device is not double-booked for another meeting. These meetings cannot be modified, meeting controls do not apply, and dial in information is not available. However, tickets can be created, and devices can be monitored for Ad Hoc meetings.

Viewing Live Meetings

1. In the navigation pane, select **Dashboard.**

   All live meetings are displayed in the list.

   > **TIP** To refresh the list and display real-time data, on the toolbar, select ↻ .

2. To view meeting details, select a **Meeting ID** number.
3. To perform any of the following actions, at the end of the meeting row, select ⋮ and select the corresponding option:
   - **Edit Meeting**

For more information, see [Editing Non-Recurring Meetings](#) and [Editing Recurring Meetings.](#)

- **Cancel Meeting**

  For more information, see [Canceling Non-Recurring Meetings](#) and [Canceling Recurring Meetings](#).

- **Delete Meeting**

  For more information, see [CSV File Supported Data](#).

- **Monitor Meeting**

  For more information, see [Monitoring Meetings](#).

- **Meeting Details**

  For more information, see [Viewing Meeting Details](#).

- **New Ticket**

  For more information, see [Manually Creating Tickets](#).

Viewing Rooms and Devices

The Rooms and Devices section displays the total number of and specific details for the following categories, in real time:

- **Rooms**
- **In a Call**

  This includes devices currently on a call.

- **Link Down**

  This includes devices that are down.

To view items from these categories:

- Select the category button so it is shown in color.

  All rooms and devices in the selected category are displayed.

> **TIP**
> - To refresh the list and display real-time data, select ⟳ .
> - If the category button appears dimmed, those items are not displayed.
> - To display the results in a list view, select ☰ . This displays a list that includes the device, room, account, and the total number of open tickets for that room and device. Select a device name to view additional details about the device.
> - To display a summary list of the total number of rooms and devices by status, select ☷ .
> - To display all rooms and devices in a Map view, select ⬢ . Room and device status are displayed with red and green dots on the map. Select a dot to view additional details and create a new ticket.

Viewing Tickets

This section displays the total number of and specific details for the following types of open tickets, in real time:

- Critical
- Major
- Minor

To view active tickets by type:

- Select the button for the type of ticket so it is shown in color.

  All tickets with the selected status are displayed.

> **TIP** The total number of each ticket type is also available on the left navigation pane for quick reference.

To filter the display:

1. On the toolbar, select ▼.

   The **Filters** window is displayed.
2. In the **Show the last N tickets** field, enter a specific number of most recent tickets to display.
3. To limit the display to only open tickets, select the **Open (excluding tickets with all issues cleared)** check box.
4. Select **OK**.

   The **Tickets** section is updated according to the specified filter criteria.

> **TIP**
> - To refresh the list and display real-time date, select ⟳ .
> - If the category button appears dimmed, those items are not displayed.
> - To display the results in a list view, select ☰. This displays a list that includes the priority, ID, issue, and the total number of events included in that ticket. Select an ID to view additional details about the ticket.
> - To display a chart that displays the number of each type of ticket, by day, select 📈.
> - To display the number and severity of tickets displayed for each account the user is associated with, select 💼 .

Chapter 7

Managing Meetings

Based on permissions and services, users can view, edit, cancel, delete, moderate, monitor meetings or create tickets for meetings using the **Meetings List** view.

Viewing Meetings in List View

The Meeting List page displays meetings that are scheduled today. This list can be filtered to display meetings that only meet certain criteria based on time frame, those assigned to specific people, or those without Producers.

- In the navigation pane, select **Meetings** > **List View**.

  All upcoming and past meetings are listed. The display format and individual columns displayed can be modified from the default.

  > **TIP**
  > - To refresh the list and display real-time data, on the toolbar, select ↻ .
  > - Meetings that are named **AdHoc Conference: *location***, are Ad Hoc meetings. Ad Hoc meetings are automatically generated by Symphony when a device is manually in use, so the device is not double-booked for another meeting. These meetings cannot be modified, meeting controls do not apply, and dial in information is not available. However, tickets can be created, and devices can be monitored for Ad Hoc meetings.
  > - If the **Producer** column is displayed:
  >
  > | If a user… | Then the Producer field indicates… |
  > | --- | --- |
  > | Selects the Request Producer Attendance check box, | Requested. |
  > | Assigns a Producer to the meeting, | The assigned Producer's name. |
  > | Does not assign a Producer to the meeting, | No producer assigned. |

Changing the Meeting List View Display

By default, certain columns are displayed in the list view. However, the view can be modified to display and hide columns as needed.

1. In the navigation pane, select **Meetings** > **List View**.

2. On the toolbar, select ⬚.

The **Select Columns** window is displayed.

3. In the **Wrap Text** field, select one of the following:
    *   **Yes**
        Wraps the text in the column if the number of characters exceeds the limit of characters that can be shown on a line in that column.
    *   **No**
        Truncates the text in the column if the number of characters exceeds the limit of characters that can be shown on a line in that column.
4. Select the check box next to each column name that should be displayed.
5. Clear the check box next to each column name that should not be displayed.
6. Next to any column, select and drag the ≡ to the order in which that column should be displayed.
7. Select **OK**.

Filtering the Meetings List View

1. On the toolbar, select ▼.
    The **Filters** window is displayed.
2. In the **List Meetings** menu, select a specified or **Custom** time frame to limit the display to.

    > **TIP** Meetings up to 31 days from the current date can be displayed.

3. In the **Show** field, select the type of meetings to display. Options include:
    *   **All Meetings**
    *   **Meetings Assigned to Me**
    *   **Meeting without Producers**
    *   **Meetings assigned to** *username*
4. In the following fields, select the criteria to include in the Meeting List:
    *   **Include status**
    *   **Include purpose**
    *   **Include type**

    > **TIP** Options that are shaded dark blue are selected; options shaded white are not selected. At least one selected option in each field is required.

5. Select **OK**.
    The **Meeting List** is updated according to the selected filter criteria.

Viewing Meetings in Map View

The **Map View** function displays meetings that are in progress or in the future.
When a user selects a location on the map, Symphony remembers and displays that same location, by default, for future sessions.

1. In the left navigation pane, select **Meetings** > **Map View**.
2. Select a location and drill-down to view the meeting details.
3. Select ➕ or ➖ to zoom in or out of specific areas.

> **TIP**
> - To display a satellite view of the map, on the toolbar, select ⚓ .
> - To refresh the map and display real-time data, on the toolbar, select ↻ .
> - To reset the map to a location other than the one previously selected to display, open the **Filter** settings, and select **Reset**.

Filtering the Meetings Map View

1. On the toolbar, select ▼.
   The **Filters** screen is displayed.
2. In the **List Meetings** menu, select a specified or **Custom** time frame to limit the display to.

> **TIP** Meetings up to 31 days from the current date can be displayed.

3. In the **Show** field, select the type of meetings to display. Options include:
   - **All Meetings**
   - **Meetings Assigned to Me**
   - **Meeting without Producers**
   - **Meetings assigned to *username***
4. In the following fields, select the criteria to include in the Meeting List:
   - **Include status**
   - **Include purpose**
   - **Include type**

> **TIP** Options that are shaded dark blue are selected; options shaded white are not selected. At least one selected option in each field is required.

5. In the **Show Legend** field, **Yes** is selected by default. Select **No** to remove the legend that

displays the color coding indicators for meetings by type, status, and those with or without issues.

6. Select **OK**.

   The **Meeting List** is updated according to the selected filter criteria.

Viewing Meetings in Calendar View

The Calendar View displays all scheduled meetings for the month, week, or day in a Calendar format or all meetings for the current week in a list format.

To open the Calendar View:

▪ In the left navigation pane, select **Meetings** > **Calendar View**.

> **TIP**
> - To refresh the calendar and display real-time data, on the toolbar, select ↻ .
> - To display the previous month, week, or day, select ‹ .
> - To display the upcoming month, week, or day, select › .

Viewing Meeting Details

The details displayed are based on a user's permissions.

1. In the navigation pane, select **Meetings** > **List View**.
2. Select a **Meeting ID** number.

   The meeting details are displayed in two panes. Most of the details displayed on the left are static details for informational purposes only. The interactive meeting components are displayed on the right in the **Rooms & Participants** section.
3. On the left side of the page, select a tab to display details associated with the meeting:

Icon	Tab	Description
ℹ	Information	Includes static information about the meeting such as the meeting name, date and time, purpose, recording details, and the requested Producer.
👥	E-Logs	Includes connection information, such as protocol, direction, and bandwidth, for the rooms that are part of the meeting.
$	Billing	Includes billing information for the meeting that will then be available in the Billing reports.
🏷	Tickets	Displays ticket details for any tickets associated with the selected meeting. For more information, see Working with Tickets.
🕘	Revisions	Displays a running list of all changes made to the meeting and who made those changes. This is not visible for AdHoc meetings.

Icon	Tab	Description
🖉	Comments	Includes notes about the meeting and notes entered by the Producer, if applicable. These sections can be edited.
🖳	Dial-In Information	Includes the details for participants to connect to the meeting and can be copied to the user's clipboard and pasted in a notification to a new attendee to quickly send them an invite. This is not visible for AdHoc meetings.

Adding E-Logs

1. On the **E-Logs** tab, select ✛.
    The **Add E-Log** window is displayed.
2. Complete the following fields, as applicable:
    - **From**
    - **To**
    - **Protocol**
    - **Direction**
    - **Address**
    - **Bandwidth**
    - **Bridge**

    > **TIP**   Only bridges added to the meeting are displayed in this list.

    - **Room**
    - **Device**
    - **Billing Code**
    - **Quantity**
3. Select **Update**.

Deleting E-Logs

1. On the **E-Logs** tab, select the check boxes next to the e-logs that should be deleted.

    > **TIP**   To delete all e-logs, select the top checkbox in the column.

2. On the top-right toolbar, select ▬.
    A **Warning** is displayed confirming the selected e-log should be deleted.
3. Select **OK**.

Adding Billing Entries

1. On the **Billing** tab, select ✚.
   The **Add Billing Entry** window is displayed.
2. Complete the following fields:
   - **Billing Code**
     Select the correct billing code the meeting should be billed to. Both the billing code and description are displayed.

     > **TIP** To display only frequently used billing codes in this list, select the **Frequent billing codes only** check box. Billing codes are identified as frequently used codes at the Account level. For more information, see Billing Codes.

   - **Quantity**
     This is the number of minutes the meeting was connected.
3. Select **OK**.

Deleting Billing Entries

1. On the **Billing** tab, select the check boxes next to the billing entries that should be deleted.

   > **TIP** To delete all billing entries, select the top checkbox in the column.

2. On the top-right toolbar, select ➖ .
   A **Warning** is displayed confirming the selected billing reports should be deleted.
3. Select **OK**.

Editing Meeting Comments

1. In the **Meeting List**, select a meeting ID number.
   The meeting details are displayed.
2. Select ✏ .
   The **Comments** tab is displayed.
3. In the **Meeting's notes** or **Producer's notes** section, select **Edit**.
4. Enter the notes.
5. Select **Save**.

Editing Non-Recurring Meetings

If a meeting is scheduled for the future, it can be modified. The meeting can be modified or canceled.

> **NOTE**   AdHoc Conference meetings cannot be modified.

1. On the meeting details page, select **Edit**.
    The **Edit a Symphony Meeting** window is displayed.
2. Change the meeting settings on each tab.
3. Select **Update**.
    A **Meeting Confirmation** message is displayed if the meeting was updated successfully. Symphony emails the participants with the updates.

Editing Recurring Meetings

If a recurring meeting is scheduled for the future, the entire series can be modified, or just the selected occurrence.

> **NOTE**   AdHoc Conference meetings cannot be modified.

1. On the meeting details page, select **Edit**.
    A confirmation is displayed notifying you that the meeting is a recurring meeting.
2. Do one of the following:
    *   To edit just the selected occurrence, select **Only This Instance**.
    *   To edit all meetings in the series, select **Entire Series**.
    The **Edit a Symphony Meeting** window is displayed.
3. Change the meeting settings on each tab.

If…	Then…
Editing only this occurrence,	All meeting details can be modified.
Editing the entire series,	The start and end dates and times cannot be modified; all other details can be modified.

4. Select **Update**.
    A **Meeting Confirmation** message is displayed. Symphony emails the participants with the updates.

Canceling Non-Recurring Meetings

1. On the meeting details page, select **Edit**.

   The **Edit a Symphony Meeting** window is displayed.
2. Select **Cancel Meeting**.
3. Select **Update**.

   A **Meeting Confirmation** message is displayed if the meeting was updated successfully. Symphony emails the participants with the updates.

Canceling Recurring Meetings

1. On the meeting details page, select **Edit**.

   A confirmation is displayed notifying you that the meeting is a recurring meeting.
2. Do one of the following:
   - To edit just the selected occurrence, select **Only This Instance**.
   - To edit all meetings in the series, select **Entire Series**.

   The **Edit a Symphony Meeting** window is displayed.
3. Select Cancel Meeting.

   A Warning is displayed, confirming cancelation of only the selected occurrence or the entire series.
4. Select or clear the **Notify the meeting attendees** check box.
5. Do one of the following, based on previously selected options and what is displayed on the window:
   - To cancel all future occurrences, select **Cancel all**.
   - To cancel this occurrence only, select **Cancel instance only**.
6. Select **Update**.

Rescheduling Meetings

Meetings can only be rescheduled if they were previously canceled, or the meeting has ended.

1. On the meeting details page, select **Reschedule**.

   The Schedule a Symphony Meeting window is displayed.
2. On the **Appointment** tab, select a new date and time.
3. Update additional meeting details, as necessary.
4. Select **Send**.

Wrapping Up Meetings

When a meeting is complete, users can log details about the meeting to ensure all tickets are routed to the correct person, log attendance, and review billing details.

1. On the meeting details page, select **Wrap Up**.

   The **Wrap Up Meeting** window is displayed.

2. Review and edit all information, as necessary, on each of the following pages and select **Next**:
   - **Meeting Options**
   - **Producer Feedback**
   - **Review Tickets**
   - **Attendance**
     This page is only available if the account is set up to track attendance in meetings.
   - **Billing**

3. On the **Finish** page, select **Ready for Reporting**.

   The meeting details are displayed and the **Wrap Up** button is replaced with the **Undo Wrap Up** button.

> **TIP** Select **Undo Wrap Up** to remove the wrap up details from the meeting and perform these steps again to add new Wrap Up details to the meeting.

Viewing the Meeting Status

The colored status bar shows the status of the meeting. Meeting statuses include:

Status	Description
Scheduled	The meeting is scheduled but has not started.
In Progress	The meeting is live and cannot be canceled while it is in progress.
Failed	The meeting failed to launch at the scheduled time.
Cancelled	The meeting was cancelled. The status of a canceled meeting cannot be changed.
Completed	The meeting has ended and cannot be cancelled.

To change the meeting status:

1. On the meeting details page, select the colored status bar.

   The **Change status for meeting #*meetingnumber*** is displayed.

2. Select a new status from the list.

3. Select **OK**.

Batch Importing Meetings

Meetings can be batch imported by uploading a .csv file containing records for multiple meetings. The .csv file must contain a minimum of two rows. The first row is the header row that defines the data type for that column, such as transactionID, meetingPurpose, and participants. All additional rows contain the data for the meetings.

1. In the left navigation pane, select **Meetings > List View**.
2. Select the 🔵 icon.
   The **Import Meetings** window is displayed.
3. Select the account the meetings should be imported into.
4. Select **File**.
5. Select the **.csv** file containing the meeting data.
6. Select **Upload**.
   The **Import Meetings window** displays the status of the import including:
   - The number of meetings successfully imported.
   - Errors encountered.
   - Conflict errors, such as meetings that are already scheduled on the same date, time, or in the same room.

> **NOTE** If conflicts are not resolved prior to the meeting, all participants are invited to the meeting. If a previous meeting is still in progress, the meeting owner is alerted and can choose to ignore or accept the new meeting participants.

CSV File Supported Data

The following data types are supported and automatically mapped during the import process. These data types are in the first row of the .csv file, also referred to as the column header:

Data Type	Description	Supported Values
emailParticipants	Comma separated list of email addresses with names in quotes.	A valid email address
end	Date when meeting ends. UNIX timestamp with millisecond precision.	
meetingPurpose	Supported meeting purpose options.	• Other • Maintenance • RegularMeeting • CertificationOfManaged • CertificationOfUnmanaged • Sweep
meetingRoomExternalIds	Meeting room external identifiers (multiple values).	A comma separated list of room third party IDs
meetingRoomIds	Meeting room unique identifier (multiple values).	A comma separated list of universally unique room identifiers.
meetingRoomNames	Meeting room names (multiple values).	A comma separated list of room names

Data Type	Description	Supported Values
meetingSetup	Specifies if this scheduled meeting will be auto launched.	• Automatic • Manual
notes	Meeting notes added to the meeting body.	
ownerEmail	Meeting owner's email address.	A valid email address
recorded	Flag that signifies if meeting is recorded.	true / false
requestorEmail	Meeting requester.	A valid email address
sendEmailNotification	Flag that specifies if e-mail notification should be sent.	true / false
setupTimeMinutes	The number of setup minutes reserved for this scheduled meeting.	A numeric value.
start	Date when meeting starts. UNIX timestamp with millisecond precision.	
status	Date when meeting starts. UNIX timestamp with millisecond precision.	• Scheduled • Canceled • Deleted
subject	Meeting subject.	A Text field with a 255-character limit
timeZone	Meeting time zone.	A valid time zone
transactionID	CSV row transaction id.	
vip	This field indicates if the meeting is a VIP or not.	true / false
BAN	The Billing Account Number that applies to the meeting.	
CostCenter	The Cost Center for accounts that use Billing Account Number.	

Deleting Meetings

Deleting a meeting removes all traces of the meeting from Symphony; meeting information can no longer be viewed. If the meeting is recurring, all past and future occurrences of the meeting are deleted.

1. In the navigation pane, select **Meetings** > **List View**.

2. At the end of meeting row for the meeting that should be deleted, select and select **Delete Meeting**.

   A **Warning** is displayed confirming that all traces of the meeting will be deleted, including billing details.

3. To confirm the deletion, select **OK**.

   Symphony removes all details related to the meeting.

Managing Meeting Rooms and Participants

The **Rooms & Participants** section of the meeting details page shows:

- Scheduled rooms and devices.
- Rooms and devices currently connected to the meeting.
- Acceptance status for each room invited to a meeting.
- The recording device if the meeting is being recorded.

> **NOTE** The term Participants can refer to rooms, devices, or attendees based on the context of the reference.

Viewing Meeting Rooms and Participants

1. In the navigation pane, select **Meetings** > **List View**.
2. Select a **Meeting ID** number.

   The rooms and devices associated with the meeting are displayed in the **Rooms & Participants** section.

> **TIP** To filter the display, select **Filters** and select the filter criteria to apply to the list. Options include:
>
> - **Show All**
> - **Invited and not Connected**
> - **Only Connected**
> - **Only Rooms**
> - **Only Participants**
> - **Starred**

The rooms and participants can be displayed in a grid or list view. The name of each room and device are shown with a link, when applicable.

When a meeting is scheduled through Microsoft Exchange, the status of each invited room is displayed in the Rooms & Participants section. If a participant declines the meeting invite, the room is not displayed on the list.

Icon	Description
✅	The room has accepted the meeting.
❓	The room has tentatively accepted the meeting.

To view more details about a specific room or device, monitoring, status or modify the configuration:

- Select the room or device name.

To change the grid or list view:

- Select ⊟ to display in a list view or select ▦ to display in a grid view.

Viewing Meeting Room and Device Details

Each room and device include indicators, when applicable, to provide additional details or available actions at the device or room level.

1. In the navigation pane, select **Meetings > List View**.
2. Select a **Meeting ID** number.
   The meeting details are displayed.
3. In the **Rooms & Participants** section, next to the room, select ⋯.
   The following icons are displayed under the room or device, as applicable.

Icon	Description
⭐	Select to add the room and device to the favorites list. By starring them, they are deemed as higher priority and require extra attention, or they are most frequently used. The **Rooms & Participants** section of the meeting details page can be filtered to display only rooms that are starred, connected, or not connected, or only Rooms or Participants. This is most helpful when the display list includes many Rooms.
ⓘ	Select this icon to display a monitoring pane below the device with various participant statistics.
📷	Indicates that the **Room Camera URL** field in the device configuration contains a link. Select this icon to open the link.
📋	Select this icon to view Room comments and notes.
📅	Releases a disconnected room from the meeting. Before a room can be released, it must be disconnected. For more information, see [Disconnecting Rooms from a Meeting](#) and [Releasing a Disconnected Room from a Meeting](#).
💬	Available if the MCU type used supports this functionality. Select this icon to send a custom message to specific meeting participants. The message sent appears as a scrolling marquee to the recipient. Options such as color, font size, number of times to repeat the scrolling message, scroll speed, position of the marquee on participants screen, and marquee transparency can be specified.
🔊	Available if the MCU type used supports this functionality. Select this icon to mute and unmute this participant's audio speaker feed.

Icon	Description
	Select this icon to mute or unmute this participant's audio feed.
	Available if the MCU type used supports this functionality. Select this icon to block or show this participant's video feed.
	Invite rooms and users with SIP/H323 addresses to the meeting. Only rooms listed as participants but not connected to the meeting are displayed.

Disconnecting Rooms from a Meeting

Producers can release a room from a scheduled meeting and the room no longer appears as scheduled.

1. In the navigation pane, select **Meetings > List View**.
2. In the **Meeting List**, select a **meeting ID** number.

   The meeting details are displayed. All rooms and devices are listed on the right side in the **Rooms & Participants** section.

3. Next to a room or device, select .
4. Select .

   A **Warning** is displayed confirming the disconnection.

5. Select **OK**.

> **TIP** The room can also be released from the meeting schedule at the same time it is disconnected.
> To release the room, select the **Release the room (Conference Room) from the meeting** check box and select **OK**.

The Room is no longer connected to the meeting and there are no options available to manage that room.

Releasing a Disconnected Rooms from a Meeting

Producers can release and free up any room from the scheduled meeting. An example of why a Producer would use this feature includes:
- An all-day meeting is scheduled for Room A, B and C.
- Mid-day, Room C is no longer required.
- The Producer can release Room C from the schedule to use the room for another meeting.

Before a room can be released, it must be disconnected. A room can be released while it is being disconnected or later. For more information, see <u>Disconnecting Rooms from a Meeting</u>.

1. In the navigation pane, select **Meetings > List View**.

2. In the **Meeting List**, select a **meeting ID** number.

   The meeting details are displayed. All rooms and devices are listed on the right side in the **Rooms & Participants** section.

3. Next to a room or device, select ⚬.

4. Select 🗓.

   A **Warning** is displayed confirming the request to release the room from the meeting.

5. Select **OK**.

   The room is removed from the meeting.

Adding Rooms and Devices to Meetings

1. In the navigation pane, select **Meetings > List View**.

2. Select a **Meeting ID** number.

   The meeting details are displayed.

3. In the Rooms & Participants section, select Meeting controls.

   The available control options are displayed.

4. Select Add Participant.

   The **Invite Participant** window is displayed and contains the following tabs:
   - Directory
   - Favorites
   - Recent
   - Other

5. Do one of the following:
   - On the **Directory** tab, select a location name and select ➕ to select that room or device.

   > **TIP**
   > Select the ♡ next to any room name to add it to the Favorites tabs. Favorites can be used to quickly select rooms that are most frequently used.

   - On the **Favorites** tab, select ➕ to select a room or device previously designated as a favorite.
   - On the **Recent** tab, select ➕ to select a recently used room or device.
   - On the **Other** tab, manually enter the details for an unmanaged endpoint device.
   The selected rooms and devices are added to the **Selected Rooms** section.

   > **TIP**
   > If a selected room was added via the **Other** tab, that room can be modified, and the change is applied to that room for the current meeting only.

If the room was a favorite, the modified room is not automatically saved as a favorite and does not override the current favorite room. If both the original and edited room should be saved as favorites, then the edited room must be added to the **Favorites** list.

To edit a selected room previously added via the **Other** tab:

1. In the **Selected Rooms** section, select the link for the specific room.

2. On the **Custom Room** window, edit the room details.
3. Click **OK**.
   The modified room replaces the original room in the meeting only. It is not a Favorite and does not replace the previously designated Favorite room.

   The originally selected Favorite is removed from the **Selected Rooms** section and is visible on the **Favorites** tab.

6. To review the selected rooms' and devices' calendars, select **Show Rooms Schedule**.
   The schedule is displayed for all the selected rooms and devices.

7. Select **OK**.

   An invitation is sent to the selected rooms and devices.

Moderating Meetings

While a meeting is in progress, the meeting controls can be used to moderate a meeting and any connected devices or participants. These controls are available on the meeting details page in the **Rooms & Participants** section.

Moderation tools vary based on MCU type.

The following Meeting controls are available for all meetings that are in progress:

Button	Description
Add Participant	Add rooms and devices to the meeting. For more information, see Adding Rooms and Devices to Meetings.
Terminate	Terminate the meeting. When a meeting is terminated: • All devices and participants connected via audio bridge are disconnected. • If the meeting is being recorded, the recording stops. • The meeting Status is changed to Completed. • For more information, see Terminating Meetings.
Record	Records the meeting. For more information, see Recording Meetings.
Stop	Stops recording the meeting without stopping the meeting.
Pause	Pause the recording of the meeting without stopping the meeting.
Framing	Available if the MCU type used supports this functionality. The conferencing layout can be adjusted.

Button	Description
	For more information, see [Framing Meetings](#).
Message All	Available if the MCU type used supports this functionality. Sends a message to all attendees.
	For more information, see [Messaging Meeting Attendees](#).
Extend	Available if the MCU type used supports this functionality. The meeting can be extended instantly using this option.
	For more information, see [Extending Meetings](#).

Terminating Meetings

1. In the navigation pane, select **Meetings** > **List View**.
2. Select a **Meeting ID** number.
   The meeting details are displayed.
3. In the Rooms & Participants section, select Meeting controls.
   The available control options are displayed.
4. Select **Terminate**.
   A **Warning** is displayed confirming the request to terminate the meeting.
5. Select **OK**.

Recording Meetings

A recording can be started, stopped, and restarted multiple times during a meeting. A notification email is sent for each recorded session.

If the recording option was selected when the meeting was scheduled, Symphony automatically starts recording, and the **Rooms & Participants** pane shows the **Stop** and **Pause** options.

> **NOTE** Recordings are not displayed in the **Recordings** category immediately. The longer the recording, the longer the delay.

1. In the navigation pane, select **Meetings** > **List View**.
2. Select a **Meeting ID** number.
   The meeting details are displayed.
3. In the Rooms & Participants section, select **Meeting controls**.
   The available control options are displayed.
4. Select **Record**.
   The Select owner of the recording window is displayed.
5. Do one of the following:
   - To keep the default recording owner, select **OK**.

- Select a new owner for the recording and select **OK**.

> **NOTE**
> - By default, meeting recordings are assigned to the meeting Owner. A Producer can optionally assign themselves or another meeting attendee, who has a Symphony account and is associated with the meeting account, to be the Recording Owner of a Meeting.
> - Only Producers can view/utilize the option to reassign a Recording Owner.

Framing Meetings

The default meeting layout can be set when the meeting is scheduled, or it can be modified at the meeting level.

For example, the larger video frame can show the main speaker while other participants are minimized to the side or bottom of the video display or, in a meeting with four participants, all participants can be shown in identical size frames.

1. In the navigation pane, select **Meetings** > **List View**.
2. Select a **Meeting ID** number.

   The meeting details are displayed.
3. In the Rooms & Participants section, select Meeting controls.

   The available control options are displayed.
4. Select **Framing**.
5. In the **Layout Geometry** section, select the number of attendees and a corresponding layout for that number.
6. In the **Layout Pinning** section, select which device should be shown on each part of the video display.

> **NOTE** This option is not available for DMA MCU devices.

7. Select **OK**.

Messaging Meeting Attendees

Depending on the MCU type, a customized chat message can be sent to the whole group or individual participants. The message appears as a scrolling marquee to the recipient and can be cleared instantly.

1. In the navigation pane, select **Meetings** > **List View**.
2. Select a **Meeting ID** number.

The meeting details are displayed.

3. In the Rooms & Participants section, select **Meeting controls**.

    The available control options are displayed.

4. Select Message All.

    The **Send Message to All** window is displayed.

5. Enter a message, with a maximum character limit of 50.

6. To customize the message formatting, select **More Options**.

7. Complete the following fields:
    *   Color
    *   Font Size
    *   Repeat
        Select the number of times to repeat the scrolling message.
    *   Speed
    *   Position
        Select the location of the marquee on the participants' window.
    *   Transparency
        Select the transparency percentage of the marquee that is displayed.

8. Select **OK**.

Extending Meetings

Depending on the MCU type, the duration of a meeting can be extended.
When Windows Exchange server is configured, an email is sent to show the new meeting duration.

1. In the navigation pane, select **Meetings > List View**.

2. Select a **Meeting ID** number.

    The meeting details are displayed.

3. In the **Rooms & Participants** section, select Meeting controls.

    The available control options are displayed.

4. Select **Extend**.

    The **Extend Duration** window is displayed.

5. Do one of the following:
    *   Select the amount of time the meeting should be extended.
    *   Select **Other** and specify a specific amount of time.

6. Select **OK**.

Monitoring Meetings

Meetings, both live or completed, can be monitored for multiple metrics, such as Ping Latency or Bitrate, on one dashboard – the Monitoring window. This dashboard provides detailed information for all meeting participants, either by device or metric. The graphs displayed on the dashboard are updated regularly so they display real-time data for live meetings. For completed meetings, the graphs display the data for the meeting time frame only.

The left pane includes options to view:

- An overview that shows all call statistics for each room and shows all rooms in one dashboard. This is available for live meetings only.
- The metrics available for all invited rooms, such as Ping Latency and Bitrate.
  This is available for both live and completed meetings.
- All available metrics for a selected device.
  This is available for both live and completed meetings.

The right side of the dashboard displays graphics for each selected metric or room or an Overview, which displays a separate graphic for each room that includes all call metrics. Rooms that are not connected to a meeting appear blurred.

Connected
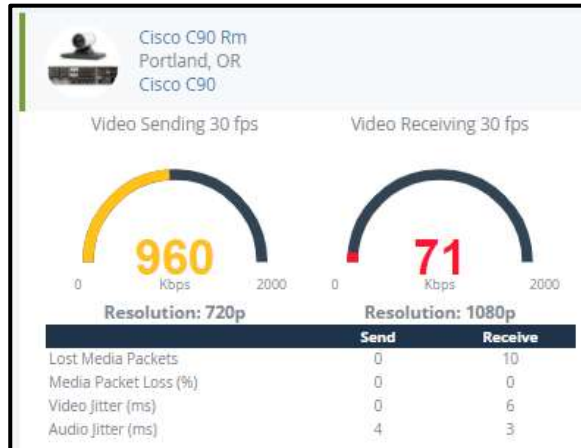
Not Connected

1. In the navigation pane, select **Meetings** > **List View**.
2. Select a **Meeting ID** number.

   The meeting details are displayed.
3. Select **Monitor**.

   The **Monitoring** window is displayed.
4. Do one of the following:
   - To view a graphic for all devices that includes call metrics, select **Overview**.
     This option is only available for Live meetings.
   - To view one metric for all devices, in the **Filter By Metrics** section, select one of the following metrics:

Option	Description
Ping Latency	The dotted lines indicate the minor, major, and critical event monitoring trigger.

Option	Description
Speed	If content is being shared in a meeting, this displays the frame rate being sent (blue line) and received (brown line). The dotted lines represent the monitoring trigger set for this option.
Bitrate	Displays the call rate speed being sent (blue line) and received (brown line). The bottom of the graph includes the current rate being sent in Kbps and the average call rate for the meeting.
Packet Loss (%)	Packet loss percentages for devices are tracked in real-time. In addition, the total number of packets lost for active devices is tracked during a meeting.
Jitter	Jitter is tracked in near real-time during a meeting and will auto-generate tickets and events based on monitoring restriction violations. To switch between Audio and Video Jitter, select 🔊 or 📹, respectively. The statistics are updated for the selected Jitter type.

- To view all metrics for only one device, in the **Filter By Room** section, select a room.
5. To close the **Monitoring** window, click **OK**.

Device Monitoring Status Indicator

When a device managed and monitored by Symphony is connected to the meeting, the **Rooms & Participants** pane includes a status indicator.

This indicator is like a cell phone signal strength display and reflects the live status of the device in relation to the following monitoring events: Ping Latency, Packet Loss, Audio Jitter, Video Jitter, Video Speed, and Call Rate.

Indicator	Since the beginning of the call, the device experienced…
	No monitoring issues
	At least one issue with a **low** priority
	At least one issue with a **major** priority
	At least one issue with a **critical** priority
	The status for the device is unknown. The statistics necessary for the indicator are dependent on the device's API related results. Some devices do not provide enough information to set the indicator, thus resulting in "Unknown" status.

V.I.P. Management

The following can be tagged as V.I.P.s:

- Meetings
- Rooms
- Devices
- Users

A V.I.P. designation means that the meeting, room, device, or user is flagged for a potential change in service or requires special attention. For example, a V.I.P. device might connect to a different server due to quality or at a different speed.

If any of the users, rooms, or devices associated with a meeting are tagged as V.I.P., then the meeting is automatically tagged as V.I.P. If an account has a multipoint control unit (MCU) device and the V.I.P. feature is turned on, that device is preferred for hosting a V.I.P. Meeting.

The V.I.P. Meeting designation can be turned on when the meeting is scheduled or after it begins.

All V.I.P.s are indicated on lists and reports. Reports can be filtered to display only V.I.P.s.

V.I.P. meetings terminate at the scheduled meeting end time unless the account is configured to prevent V.I.P. meetings from being auto terminated. For more information, see Enabling the Never Auto-terminate V.I.P. Meetings Option.

Designating In-Progress Meetings as V.I.P.s

1. In the navigation pane, select **Meetings** > **List View**.
2. On the **Meeting List** page, select a **meeting ID** number.
3. On the meeting details page, select **Edit**.
   The **Edit a Symphony Meeting** window is displayed.
4. On the **Producer** tab, select the **Meeting V.I.P.** check box.
5. Select **Update**.
   A **Meeting Confirmation** message is displayed if the meeting was updated successfully. Symphony emails the participants with the updates.

Chapter 8

Monitoring Devices and Rooms

Symphony provides 24/7 remote digital monitoring of any IP-addressable audio visual (AV), video conferencing, or device located on premises.

Symphony devices are managed by room. Statistics are gathered and recorded; they can be viewed and used to create reports. Device restrictions and triggers can also be set to generate tickets when a that restriction is violated.

Monitoring capabilities depend on each device's supported communication standards, including:
- Simple Monitoring

    Dependent on the Monitoring Source. Symphony pings the device to confirm it is either online, offline, or SNMP support, which may provide additional alert-based information, such as low projector bulb life or overheating.
- Rich Monitoring

    Includes Simple Monitoring and supports API, Login, and provides multiple monitoring statistics.

Symphony allows proactive monitoring of devices, including:
- Performing live device monitoring during a meeting.
- Viewing historical monitoring data (for up to 30 days) and obtain Monitoring Statistics for a device, such as up/down, ping latency, A/V jitter, and quality. The lifecycle of monitoring data is broken into these stages:

Stage	Age of Data	To View the date …
Live	0 – 30 days	Use the monitoring interface of the Symphony portal to: • Open the Device Detail View of the device. • Select the date in which you are interested.
Report	Historical (31+ days)	Use the Analytics report date range. Most, but not all, types of monitoring data are available in reports.

- Configuring Device Monitoring Restrictions, such as:
    - Implementing a schedule where a specific device should not be monitored.
    - Generating tickets when a device's monitoring restriction is violated. For example, communication errors or registration.
- Performing monitoring directly via the device API, SNMP, or Aggregators/Controllers.

What does Symphony Monitor?

Symphony pings devices (including Aggregators/Controllers) every 60 seconds.

For	Symphony monitors…	
Device with an IP address	• Up/Down • Ping Latency	
Managed and supported video conferencing devices	• Device communication • Device logins • Device synchronization • H.323 Gatekeeper registration • SIP Registrar registration • Ping Latency	• Packet Loss • Audio/Video/Content jitter • Content speed • Video speed • Video resolution • Content & Media Channel Bitrate • MCU Port usage
SNMP v1 or v2c devices	Anything that has an SNMP OID.	
Managed devices connected to a Controller or Aggregator	the device behind a controller or aggregator if the device is not network enabled. The type of data that can be monitored depends on the type of devices connected to the controller. With a Controller, the Symphony room view provides an overview of all devices attached to the room. If a device is not listed but is network enabled, Symphony can monitor up/down status of the device.	

Viewing Devices and Rooms in List View

1. In the navigation pane, select **Devices** > **List View**.
   All managed devices are listed. By default, the devices are grouped by room.
2. Select ❯ to expand a room and display all devices in that room.
3. Select a room or device name.

> **TIP**
> - Select ◔ to filter the list by country. For more information, see <u>Filter Device List by Country</u>.
> - Select 🖺 to export the list to a csv file.
> - Select ↻ to refresh the list and display real-time data.
> - Select ▯ to modify the columns displayed on the tab. For more information, see <u>Showing/Hiding Columns in the Device List View</u>.
> - Select ▼ to filter the displayed data. For more information, see <u>Filtering the Devices List View</u>.

- When applicable, next to room and device names are flashing alert indicators. Hover over an alert indicator to view additional details regarding the device and open alerts.
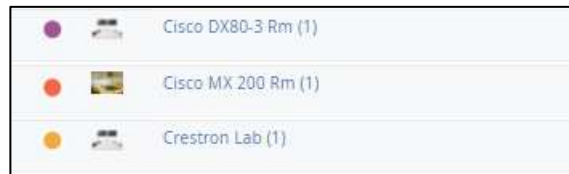
Showing/Hiding Columns in the Device List View

By default, certain columns are displayed in the list view. However, the view can be modified to display and hide columns as needed.

1. In the navigation pane, select **Devices** > **List View**.

2. On the toolbar, select ⬚.
   The **Select Columns** window is displayed.

3. In the **Wrap Text** field, select one of the following:
   - **Yes**
     Wraps the text in the column if the number of characters exceeds the limit of characters that can be shown on a line in that column.
   - **No**
     Truncates the text in the column if the number of characters exceeds the limit of characters that can be shown on a line in that column.

4. Do one of the following:
   - Select the check box next to each column name that should be displayed.
   - Clear the check box next to each column name that should not be displayed.

5. Next to any column, select and drag the ☰ to the order in which that column should be displayed.

> **TIP** In the **Certification** column, if displayed, the date is displayed in red if it is expired and green if it is still valid.

6. Select **OK**.

Filtering the Devices List by Country

The List view of Devices can be filtered to display only those devices in specific countries. The countries included in the filter list are limited to those locations that exist on the Account. Setting this filter also sets it at the Ticket List view.

1. In the navigation pane, select **Devices** > **List View**.

2. On the toolbar, select ⊕ .

3. Select or deselect the checkboxes countries based on which devices should be displayed in the list.

4. Select **OK**.

Filtering the Devices List View

1. In the navigation pane, select **Devices** > **List View**.

2. On the toolbar, select ▼ .

   The **Filter** window is displayed.

3. Complete the following fields:

Field	Description
Show Only Devices from Managed Rooms	Select **Yes** to limit the display to show devices in rooms that are managed by Symphony. Select **No** to show all devices.
Show Only Devices with Status	Select an option to limit the display based on the following device status: • All • Unreachable • Monitoring Stalled • Monitoring Paused • API Error • Login Error • In a Call
Show Only Devices of Type	Select an option to limit the display based on the following device type: • All • AV Devices • Codecs • Computer • Infrastructure • Unknown
Group Devices per Room	By default, **Yes** is selected. Select **No** to list all devices individually rather than grouped by room.

4. Select **OK**.

   The **Devices List** is updated according to the selected filter criteria.

Exporting Device List to a CSV File

The Devices list can be exported to a csv file. The csv file can include the list data, as displayed in the List view, raw data, or raw data that also includes each active Extended property.

1. In the navigation pane, select **Devices** > **List View**.

2. On the toolbar, select ⧉.
   The **Export List to CSV** window is displayed.

3. Select one of the following options:
   - **List view as displayed**
   - **Raw Data**
   - **Raw Data with Extended Properties**

> **NOTE** Use the **Raw Data with Extended Properties** option only when necessary as it will result in a very large csv file due to the large amount of data included.

4. Select **OK**.
   The file is generated, and a confirmation is displayed when the file is generated.

5. Download the file.

6. Select **Close** to close the confirmation window.

Device Status

When viewing the Devices list, the **Status** column includes the following icons to indicate the status of the device:

Status Icon	Description
	The status of the device is up and reachable.
	The device is currently connected a meeting.
	The status of the device is down and unreachable.
	The status of the device is unknown.
	This indicates a detected issue.
	The device monitoring is paused and the end time for the pause duration is noted. This status can also occur when the device is outside of the monitoring schedule.
	The device cannot be monitored at the present time. When device monitoring stops, the **Status** field displays **Unknown**. Symphony shows an alert for devices with **Unknown** status and a ticket is not generated. The Device details displays a message regarding the last known update of the device.

Status Icon	Description
	AVI-SPL handles Cloud Connector administration. When the Cloud Connector server connection is down, Symphony generates a ticket. The Cloud Connector device and its associated devices display an **Unknown** status.

The icons can be paired together or shown individually in the **Status** column. For example:

Status Icons	Description
	A device is down and unreachable and there is a detected issue. Hover over the exclamation point to view issue description.
	The device is up and reachable but with a detected issue.

Viewing Devices in Map View

The **Map View** function displays locations with managed devices. When a user selects a location on the map, Symphony remembers and displays that same location, by default, for future sessions.

1. In the left navigation pane, select **Devices** > **Map View**.
2. Select a location and drill-down to view the device details.
3. Select ➕ or ➖ to zoom in or out of specific areas.

> **TIP**
> - To display a satellite view of the map, on the toolbar, select ⚓ .
> - To refresh the map and display real-time data, on the toolbar, select ↻ .
> - To reset the map to a location other than the one previously selected to display, open the **Filter** settings, and select **Reset**.

Filtering the Devices Map View

1. On the toolbar, select ▼.
    The **Filter** window is displayed.
2. Complete the following fields:

Field	Description
Show Only Devices from Managed Rooms	Select **Yes** to limit the display to show devices in rooms that are managed by Symphony. Select **No** to show all devices.
Show Only Devices with Status	Select an option to limit the display based on the following device status: • All

Field	Description
	• Unreachable
	• Monitoring Stalled
	• Monitoring Paused
	• API Error
	• Login Error
	• In a Call
Show Only Devices of Type	Select an option to limit the display based on the following device type:
	• All
	• AV Devices
	• Codecs
	• Computer
	• Infrastructure
	• Unknown
Show Legend	By default, **Yes** is selected.
	Select **No** to remove the legend that displays the color coding for devices with issues and those without.

3. Select **OK**.

    The **Devices List** is updated according to the selected filter criteria.

Viewing Device Details

The details displayed are based on a user's permissions.

1. In the navigation pane, select **Devices** > **List View**.

    All managed devices are listed on the **Devices List** page. By default, the devices are grouped by room.

2. Select > to expand a room and display all devices in that room.

3. Select a Device name.

    The device details are displayed.

> **TIP** Device actions are available on the top right of the page to pause monitoring, configure, access the control panel for, and manage the device. For more information, see Accessing a Device's Control Panel, Pausing Device and Room Monitoring, Overriding Default Device Settings, and Connecting to Managed Devices.

4. On the left side of the page, select an icon to display details on that tab that are associated with the device:

Icon	Tab	Description
	Information	Includes static information about the device such as the location, associated accounts, expiration dates, and IP addresses. Each device has a unique QR code on the Information page that can be downloaded, printed, and posted near the device or shared with users. Meeting attendees can scan the code to access the device details.
	Access	Includes device related information such as the admin name and password, local port number and management interfaces. Devices with supported API have the local port configured.
	Properties	Includes the identifiable information about the device, such as the Serial Number, MAC Address, and the Software Version. The device properties depend on the type of device.
	Tickets	Displays ticket details for any open tickets associated with the device. For more information, see Working with Tickets.
	Comments	Includes notes about the device. Select **Edit** to modify the comments and select **Save**.
	Audit Trails	A report of all changes made to the device, including who made the changes, the date and time the changes were made, and exactly what was changed.

5. Review the **Status** section for the status of the device.

   This display depends on the type of device endpoint, such as Video Conferencing [VC] endpoint, MCU, Crestron/AMX AV Controller, or AV device.

> **TIP**
> - To refresh the Device status and display real-time data, on the toolbar, select ↻.
> - All monitored data, such as CPU percentage and RAM, with empty values are hidden.

Status Indicator	Description
Link Up	The device can be reached.
Link Down	The device cannot be reached.
Link Unknown	The device status is unknown.
Login OK	Symphony is logged into the device.
API OK	Symphony is communicating with the device.
API Error	Symphony is not communicating with the device.
For Crestron/AMX AV Controllers: • Symphony Module Up • No Symphony Module Detected	Determine whether the device is running/not running the Symphony Module.
Online GK	The device is registered to the Gatekeeper.
Online SIP	Device is registered to the SIP registrar.

Status Indicator	Description
No update since	Last date and time the device was contacted.

6. If available, review the **Live Monitoring** section to view statistics regarding a call.

   Options in the drop-down menu vary by device but the type of information displayed is not hard-wired to the device type. As a result, devices can send data and Symphony properly displays the data. For example, Symphony can display CPU history, RAM history, and extended properties.

   If configured, quantifiable extended properties utilizing a unit of measure, such as hardware temperature, can be displayed in the graph. These properties are configured by AVI-SPL upon request. By displaying extended properties in a graph, historical and live data can be compared and used in troubleshooting.

TIP   When viewing extended properties:

The display can be filtered to show only those properties the user can control. Click the following icons to change the display.

- ⚙

  Indicates the display includes only those properties that can be modified.

- ⚙

  Indicates the display includes properties that can be modified and those that are read-only.

A Trigger Alert can be set up directly from the Monitoring pane for any property. For more information, see [Creating Device Trigger Alerts for Extended Properties](#).

Creating Device Trigger Alerts for Extended Properties

Trigger alerts can be created at the Account, Location, Room, or Device level. However, they can also be created for a specific device at the Device Monitoring level during Monitoring.

1. In the navigation pane, select **Devices** > **List View**.

   All managed devices are listed on the **Devices List** page. By default, the devices are grouped by room.
2. Select ❯ to expand a room and display all devices in that room.
3. Select a Device name.

The device details are displayed.

4. In the **Live Monitoring** section, select **Extended Properties**.

5. To the right of any property, select ⁝ and select **Create trigger for this device**.
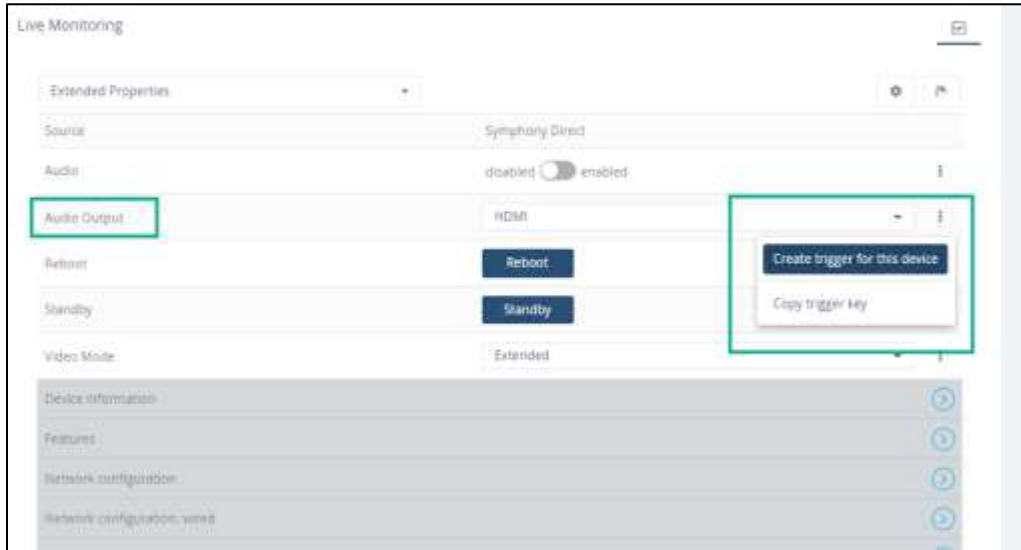
The **Add Trigger** window is displayed and the **Target > When** field is prepopulated with the property that the Trigger was created from.

For more information on the fields available on this window, see Add/Edit Trigger Window.

6. Complete all Trigger criteria fields, as necessary.
7. Select **OK**.

Viewing Device-Associated Room Details

1. In the navigation pane, select **Devices > List View**.
   All managed devices are listed on the **Devices List** page. By default, the devices are grouped by room.

2. Select a **Room** name.
   The room details are displayed as follows:

- Most of the details displayed on the left are static details for informational purposes only.
- The following action buttons for the room are available on the top right of the page:
  - **Certify** or **Recertify**
  - **Control Panel**
    For more information, see [Accessing a Device's Control Panel.](#)
  - **Room Camera**
  - **Pause Monitoring**
    For more information, see [Pausing Device and Room Monitoring.](#)
  - **Configure**
- The right pane shows a list of **Devices** in the selected room.

> **TIP** To refresh the Device list in real time, on the toolbar, select ↻ .

- The bottom right section of the page includes the following tabs, when applicable:

Icon	Tab	Description
▦	Devices	Displayed by default. Displays all devices associated with the selected room.
⚙	Advanced Controls	This tab is only available for rooms with Crestron / AMX Modules and aggregators. These controls provide additional options when monitoring or managing the devices in the selected room.

3. On the left side of the page, select a tab to display details associated with the device:

Icon	Tab	Description
ⓘ	Information	Includes static information about the device such as the location, associated accounts, expiration dates, and IP addresses.
🏷	Tickets	Displays ticket details for any open tickets associated with the device. For more information, see [Working with Tickets](#).
✏	Comments	Includes notes about the rom. Select **Edit** to modify the comments and select **Save**.
📅	Schedule	Displays the room's calendar for upcoming and previous meetings. The display can be updated to show the calendar in Month, Week, or Day format.

Viewing Device Tickets

1. In the navigation pane, select **Devices** > **List View**.
   All Managed Devices are displayed and grouped by room.
2. Select ❯ to expand a room and display all devices in that room.
3. Select a Device name.

4. Select the ⬛ tab.

   All tickets for the selected device are displayed.

Certifying Rooms

1. In the navigation pane, select **Devices** > **List View**.

   All managed devices are listed on the **Devices List** page. By default, the devices are grouped by room.

2. Select a **Room** name.

3. Select **Certify**.

4. If applicable, in the **Comment** field, enter details regarding the certification.

5. Select **OK**.

   The **Certify** button is renamed **Recertify**. The room icon now includes a starburst icon next to it to indicate it was certified. Hovering over the icon displays the date the room was last certified and the email address of the person that certified the room

   > **TIP**   The room can be recertified at any time by selecting the **Recertify** button.

Accessing a Device's Control Panel

A URL, such as a device's administrative control panel, can be specified in the **Control Panel URL** field when configuring the room. If a URL is specified, **a Control Panel** button is visible on the Room details page to open the URL in another browser tab.

For more information on where to configure the URL and enable this option, see Adding Rooms and Editing Room Details.
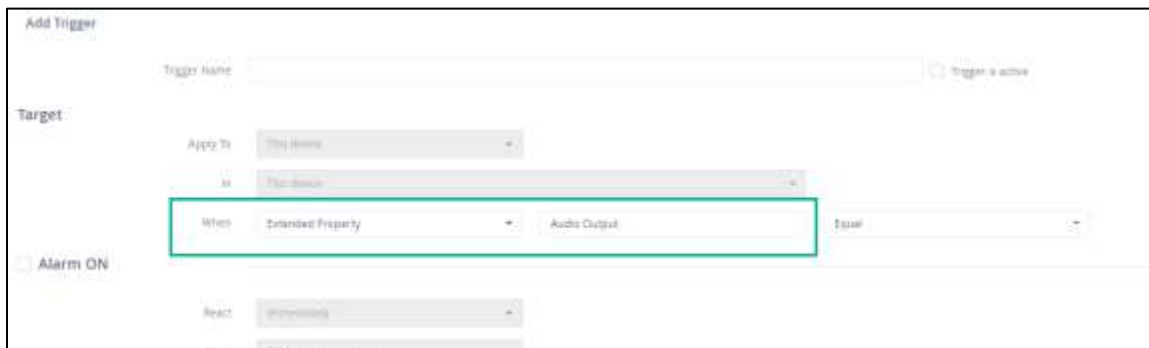
1. In the left navigation bar, select **Devices > List View.**

   All managed devices are listed on the **Devices List** page. By default, the devices are grouped by room.

2. Select a Room name.

3. Select **Control Panel**.

   The specified URL is opened in another browser tab.

Overriding Default Device Settings

The default device monitoring settings are inherited from the Account level but can be overridden at the Device level. Monitoring restrictions can be set to pause monitoring during scheduled periods or indefinitely for a specific device.

4. In the left navigation bar, select **Devices > List View.**

   All managed devices are listed on the **Devices List** page. By default, the devices are grouped by room.

5. Select ❯ to expand a room and display all devices in that room.

6. Select a Device name.

7. Select **Configure**.

   The **Edit Device** window is displayed.

8. Modify the settings on the following tabs, as necessary:

Tab	Description
Information	For more information on the fields on this tab see, Add/Edit Device | Information Tab.
Properties	For more information on the fields on this tab see, Add/Edit Device | Properties Tab.
Triggers	To edit the default trigger: 1. Select the 🔗 icon next to any option. The **Edit Trigger** window is displayed. For more information on the fields available on this window, see Add/Edit Trigger Window. 2. Edit the fields, as necessary. 3. Select **OK**. To add a new Device-level trigger: 1. On the top-right toolbar, select the ➕ icon. The **Add Trigger** window is displayed. For more information on the fields available on this window, see Add/Edit Trigger Window. 2. Select the **Alarm ON** and **Alarm OFF** check boxes to enable all fields. 3. Edit the fields, as necessary. 4. Select **OK**.
Monitoring Restrictions	To remove the default monitoring restrictions: 1. Select the 🔗 icon next to any option. The icon changes to ⊗. 2. Select the applicable check box to override that setting at the Device level.
Service Contracts & Warranty	1. Select the 🔗 icon next to any event. The icon changes to ⊗. 2. Enter the number of days, for each uninherited restriction, that will generate an alert, if reached.
Comments	Enter comments regarding the device or this configuration.

9. Select **Update**.

Setting Advanced Controls for Devices

These features are only available for rooms with Crestron / AMX Modules and aggregators.

Advanced Controls provide additional options when monitoring or managing the devices in a room. Up to nine Advanced controls can be designated as favorites, which are displayed in the **Room Controls** section.

1. In the navigation pane, select **Devices** > **List View**.
   All Managed Devices are displayed and grouped by room.
2. Select a **Room** name.
3. In the **Devices** pane, select the ⚙ icon.
4. Select the ⚙ icon to filter the display with only those properties that can be controlled.
5. Set options, as applicable for each item.

> **TIP**
> - To expand a section and display individual items in that category, select ⊙ .
> - To add a control as a favorite, select the ⭐ icon next to that control. Favorites are added to the **Room Controls** section above the **Advanced Controls** section.
> - To change the image on that Room Control button, select the image and select another image.
> - To rearrange the favorite controls, select and drag the control to another position in the **Room Controls** section.

Pausing Device and Room Monitoring

Device and Room monitoring can be stopped instantly for a specific duration of time or scheduled in advance for a specific time frame at the Device or Room level.

A device does not have to be in a call to pause the monitoring.

1. In the left navigation bar, select **Devices > List View.**
   All managed devices are listed on the **Devices List** page. By default, the devices are grouped by room.
2. Do one of the following:
   - Select a room name.
   - Select ❯ to expand a room, displaying all devices in that room and select a device name.
3. In the upper-right of the page, select **Pause Monitoring.**
   The **Pause Monitoring** window is displayed.
4. In the **Pause Device/Room Monitoring for** list, select one of the following:

- A specific amount of time to pause monitoring, such as 15 minutes or 4 hours.
- **Schedule Period…**
  Select a date and time to start and end the paused monitoring of the device or room.
- **Other**
  Specify the number of days, hours, and minutes to pause the device or room monitoring.

5. In the **Comments** field, enter details regarding the reason for the pause in monitoring.

   This comment is also added to the Audit Trails reports.

6. Select **OK**.

> **TIP** To see details about the pause in monitoring, such as who paused the monitoring, when monitoring will resume, and related comments, hover over the **Resume Monitoring** button.
>
> Select **Resume Monitoring** at any time during the pause duration to immediately begin live monitoring of the device or room.

Connecting to Managed Devices

This option is available to users with full access to the account's devices. It is used for connecting to the Web Management Interface for a device.

1. In the left navigation bar, select **Devices > List View.**

   All managed devices are listed on the **Devices List** page. By default, the devices are grouped by room.

2. Select ❯ to expand a room and display all devices in that room.

3. Select a device name.

4. In the upper-right of the room details page, select **Manage**.

   The **Connect to Device** window displays. It includes a link to the device's web management interface and the sign in credentials.

5. Select the link in Step 1.

6. Enter the device's **Username** and **Password**.

7. Select **Close**.

Viewing Device Details by Account

A summary, for each account associated with the current user, displays the total number of items associated with each account in each of the following categories:

- Countries
- Locations
- Rooms
- Devices

- Tickets

For example, the summary can show that Account X has 110 devices being monitored by Symphony in 40 rooms within 20 locations across 10 different countries and also has 42 open tickets. It also indicates if that account is Active or not and which conferencing services are available.

1. In the left navigation bar, select **Devices > Browse.**
   The **Accounts** page is displayed.
2. Select any number to view the specific details for that country, location, room, device, and ticket.

> **TIP**
> - By default, the display is shown in List view. To change the display to a tree view, in the toolbar select ⬛.
> - The legend indicates if items have associated tickets and the type of tickets, such as critical, major, or minor.
> - Select an item in the tree to display more specific details. For example, select United States to display a list of specific Locations and select Portland to display associated Rooms in Portland. Select the device at the end to display the Device Details.
> - Select the gray area around the tree diagram and drag the tree around the window.

Performing Device Ticket Room Sweeps

Ad hoc room sweeps, by room, location, or for the entire account can be launched. This sweep is checking for all unreachable devices and devices with open tickets, not endpoint connections which are checked by the scheduled room sweep.

1. In the left navigation bar, select **Devices > Browse.**
   The **Accounts** page is displayed.

2. At the end of the **_account name_** row, select ⋮ and select **Room Sweep**.
   The results are displayed.

> **TIP**
> The ⋮ option can also be found at the end of each Country, Location, Room, and Device row as you drill down through each category.

3. Select **Go Back** to return to the previous page.

Device Watch List

The Devices module includes a Watch List feature. Up to 20 devices can be added to the watch list for quick access to the most frequently used devices. Devices can be manually added to or removed from the watchlist.

Creating a Device Watch List

1. In the left navigation bar, select **Devices > List View.**
   All managed devices are listed.
2. To the far right of the Device row, select ⋮ .
3. Select **Add to Watch List**.
   A confirmation is displayed in the upper-right corner of the page stating the device was added to the watchlist.

Viewing the Device Watch List

1. In the left navigation bar, select **Devices > Watch List.**
   The **Watch List** page is displayed and includes all devices that were manually added to the list.

Removing Devices from the Watch List

1. In the left navigation bar, select **Devices > Watch List.**
   The **Watch List** page is displayed and includes all devices that were manually added to the list.
2. To the far right of the Device row, select ⋮ .
3. Select **Remove from Watch List**.
   A confirmation is displayed in the upper-right corner of the page stating the watch list was updated.

Chapter 9

Working with Tickets

Tickets are alarms opened in Symphony to report issues with a device or a meeting. Tickets are separated into two categories:

- Communication Tickets (Ping, API, Gatekeeper [GK] and SIP Registration)
- All others

Tickets can be created manually or automatically. Manually created tickets are specifically related to meetings. Automatically generated tickets are created by Symphony for different types of issues that occurred on a device connected to the local network. These issues can vary from the actual device powering down to jitter on a video call. When monitoring restriction conditions are met, a Ticket, or Ticket event, is generated. Alerts regarding the ticket are briefly displayed in a pop-up window to Administrators.

Tickets can be closed automatically when a device is deleted or according to the Ticket Closing policy.

> **TIP** With the Symphony Third-party Ticketing Adapter Library (TAL), tickets can be generated and synchronized in supported third-party ticketing systems, such as ServiceNow.

Viewing Tickets in List View

The ticket list displays all tickets that were opened both manually and automatically.

- On the navigation pane, select **Alarms > Tickets.**

  All tickets are displayed with the following columns:
  - ID
    The unique ticket number. Select an ID to view details for that ticket. The **Ticket** window is displayed with the following tabs:
    - Description
    - Details
      Used to drill down to open the room details and the meeting details.
    - Comments
    - Timeline
    - Attachments
    - Custom/Ticketing Adapter Library (TAL)

Used to integrate and synchronize with a third-party ticketing system to Symphony, such as ServiceNow.

- Troubleshooting

- Status
  The ticket status values include:

Status	Description
Open	The ticket needs to be worked. The ticket closing policy may automatically affect the ticket.
Pending Close	The ticket meets the ticket closing policy and will close automatically. The Timeline Tab shows an informational event pertaining to ticket closing policy and the timeframe for auto-closure.

Auto-close flag set: Case will be closed if the issue does not reoccur in the next 1 days

The ticket can be reopened automatically when another event occurs for the device. The event which reopens the ticket is logged in the Timeline tab like so:

Auto-close flag cleared: Same issue was detected within 1 days

| **Closed** | The ticket has been resolved OR the device has been deleted. |

- Priority
  Symphony continually pings all meetings to determine the status of the meeting. A Symphony generated ticket can resolve itself quickly, (such as generating another lower priority ticket), and close the ticket as the issue was temporary.

  Symphony notifies users of Critical (P1) tickets when an infrastructure device, such as an MCU or Cloud Connector is down. The notification for P1 infrastructure elements must be manually dismissed. AVI-SPL can also notify accounts of important messages. The user be logged into Symphony to see the message.

  The table below reflects the differences between, and examples of, Symphony generated tickets and manually created tickets for each priority.

Priority	Symphony Generated Ticket	Manual Ticket
Critical	- System offline - System cannot communicate with the device	- Area infrastructure - Bridge is down
Major	- Symphony is unable to sign in to the device but is still online - Cannot sign in	Usually occurs when something manual has been performed, such as a person/device is incapable of joining a call.
Minor	Jitter on a call exceeds Monitoring restriction	Microphone or camera had issue but resolved itself
Informational	User error	Historical information

- Account
- Device

- Room
- Location
- Issue
- Events
- Opened
- Last Update
- Cleared

> **TIP** To refresh the list and display real-time data, on the toolbar, select ↻ .

Filtering the Tickets List by Country

The List view of tickets can be filtered to display only those tickets in specific countries. The countries included in the filter list are limited to those locations that exist on the Account. Setting this filter also sets it at the Device List view.

1. In the navigation pane, select **Alarms** > **Tickets**.
2. On the toolbar, select 🌐 .
3. Select or deselect the checkboxes countries based on which tickets should be displayed in the list.
4. Select **OK**.

Filtering the Tickets List View

1. In the navigation pane, select **Alarms** > **Tickets**.
2. On the toolbar, select ▼ .
   The **Filter** window is displayed.
3. Complete the following fields:

Field	Description
List Tickets	Select the number of tickets that should be displayed or limit the display to tickets created within a specific time frame.
Include Status	Select the check box for each status that should be included in the display. Options include: • Open • Pending Close • Closed
Include Priority	Select the check box for each ticket priority that should be included in the display. Options include: • Critical • Major • Minor

Field	Description
	• Informational
Include Issues	Select the check box for each issue status that should be included in the display. Options include: • Cleared Issues • Open Issues
Show Tickets only for account	Select a specific account to display tickets associated with that account only or select **all** to show all tickets for every account.

4. Select **OK**.

Viewing Tickets in Map View

The **Map View** function displays locations with tickets. When a user selects a location on the map, Symphony remembers and displays that same location, by default, for future sessions.

1. In the left navigation pane, select **Alarms** > **Map View**.

> **TIP** There is a legend displayed at the bottom of the page that includes the color code for locations with tickets based on priority and status. Review the map for those colored circles.

2. Select a colored circle to view the ticket details.

3. Select ➕ or ➖ to zoom in or out of specific areas.

> **TIP**
> - To display a satellite view of the map, on the toolbar, select ⚓ .
> - To refresh the map and display real-time data, on the toolbar, select ↻ .
> - To reset the map to a location other than the one previously selected to display, open the **Filter** settings, and select **Reset**.

Filtering the Tickets Map View

1. On the toolbar, select ▼ .
   The **Filter** window is displayed.

2. Complete the following fields:

Field	Description
List Tickets	Select the number of tickets that should be displayed or limit the display to tickets created within a specific time frame.
Include Status	Select the check box for each status that should be included in the display. Options include: • Open • Pending Close

Field	Description
	• Closed
Include Priority	Select the check box for each ticket priority that should be included in the display. Options include: • Critical • Major • Minor • Informational
Include Issues	Select the check box for each issue status that should be included in the display. Options include: • Cleared Issues • Open Issues
Show Tickets only for account	Select a specific account to display tickets associated with that account only or select **all** to show all tickets for every account.
Show Legend	By default, **Yes** is selected. Select **No** to remove the legend that displays the color coding for locations with tickets based on priority and status.

Manually Creating Tickets

Tickets can be created manually for all devices or meetings.

1. On the navigation pane, select **Meetings** or **Devices > List View** and select a meeting or device.
2. Select New Ticket.
   The **New Ticket** window is displayed.
3. In the **Device** field, select the device that has issues.

> **TIP** If the ticket is being created at the Meeting level, this field defaults to **All (Meeting Level Ticket)** to indicate that all devices are experiencing the issue. Leave the default or select a specific device.

4. In the **Issue Type** field, select the problem that occurred.
5. In the **Issue Subtype** field, enter a subcategory for the problem.
6. In the **Time of Issue** field, select a time frame, if known, that the error occurred.
7. Enter a Description.
8. Select a **Priority**.
   The color of the **New Ticket** window changes based on the **Priority** selected.
9. Select **More** to add additional information on the following tabs:
   • Description

- Details
- Comments
- Timeline
  This tab includes events associated with the tickets. Events are the issues that generated the ticket. The event content includes monitoring errors and informational messages regarding a device and contain a priority (Critical, Major, Minor, Informational). The **Status** field is either **cleared** (resolved) or empty (no associated status). For more information about creating an event, see [Manually Creating Events](#).

10. Select Enter Ticket.

Manually Creating Events

Events can be added to a ticket manually. By default, the ticket priority changes to the highest priority of the events associated with the ticket.

1. On the navigation pane, select **Alarms** > **Tickets.**
   The **Tickets** list is displayed.
2. In the **ID** column, select a ticket number.
   The **Ticket #** window is displayed.
3. Complete the following fields:
   - **Subject**
     Enter a summary of the problem associated with the ticket.
   - **Device**
     Select the individual device associated with the ticket or select All to associate the ticket with all devices associated with a meeting.
   - **Issue**
     Select the problem that occurred.
   - **Priority**
     Specify the priority for the ticket. Options include **Critical**, **Major**, **Minor**, and **Informational**.
4. At the top left of the **Timeline Tab**, select ➕ .
   The **Create Event** window is displayed.
5. Enter a **Name** and **Description** for the event.
6. Select **Add**.
   The event is added to the list with no status and cannot be modified.

Updating Tickets

1. On the navigation pane, select **Alarms** > **Tickets.**
   The **Tickets** list is displayed.
2. In the **ID** column, select a ticket number.
   The **Ticket** window is displayed.

3. Update details on the following tabs:
    - Description
    - Details
    - Comments
    - Timeline
      This tab includes events associated with the tickets. Events are the issues that generated the ticket. The event content includes monitoring errors and informational messages regarding a device and contain a priority (Critical, Major, Minor, Informational). The **Status** field is either **cleared** (resolved) or empty (no associated status).
    - Attachments
    - Custom/Ticketing Adapter Library (TAL)
      Used to integrate and synchronize a third-party ticketing system to Symphony, such as ServiceNow.
    - Troubleshooting
      Used to determine the issues that are referenced in the ticket.

To	Select
open the device details in a new tab,	Monitor
monitor the device,	Live
view the historical Ping Latency statistics for the device,	‹ or › to review the statistics for specific days.

4. Select Update Case.

Closing Tickets

Tickets can be closed automatically or manually.

Tickets are closed automatically when a:
- Ticket is **Open** and all events associated with the ticket have a **Status** of **Cleared**.
- Device is deleted and tickets associated with that device have a status of **Open** or **Pending Close**.

To manually close tickets:

1. On the navigation pane, select **Alarms** > **Tickets.**
    The **Tickets** list is displayed.
2. In the **ID** column, select a ticket number.
    The **Ticket #** window is displayed.
3. On the **Ticket** window, select **Close Case**.
    The **Close Case** window is displayed.
4. Select the **Source** of the problem.
5. Select the **Resolution** to the problem.
6. Enter a description, if necessary.

7. Select Close Case.

Chapter 10

Administration

The Administration tasks available are based on account services and permissions.

Managing Account Configuration Settings

All Account Configuration settings can be viewed and modified in one central location. The default settings for all locations, devices, rooms, and users are inherited from settings at the Account level.

The available configuration options are based on purchased services and permissions.

1. In the left navigation bar, select **Administration > Configuration.**
   The Configuration for *accountname* page is displayed.
2. Select a configuration category and modify settings included in that category as needed.

Category	Description
Monitoring	Select a category to set monitoring conditions and triggers across the account. When the monitoring conditions are violated, a Ticket or Ticket event is generated.
	For more information, see <u>Monitoring Restrictions and Triggers</u>.
Device Catalog	This list includes all supported devices available in the Marketplace Device catalog and is automatically updated to include items that are monitored and controlled in Symphony.
	The catalog contains a default set of Simple Network Management Protocol (SNMP) Object Identifier (OID) for all relevant devices. This eliminates the need to configure SNMP OIDs for each new release of Symphony.
	Select **What's New** to view the latest device models added to the catalog. The **Catalog version** and date the catalog was last updated are displayed in the upper-left corner of the page.
Device Adapters	This list includes the Device Adapters that are set up for an account using the Device Adapter Library (DAL) component. This is related to the Symphony Adapters Management Portal (SYAMP).
Scheduling	Specify the default setup time for meetings and additional meeting settings at the account level.
	For more information about forcing V.I.P. meetings to be manually terminated, see <u>Enabling the Never Auto-terminate V.I.P. Meetings Option</u>.

Category	Description
	For more information on the Auto retry busy endpoint options, see [Auto-Retry Busy Endpoints](#).
	Select all applicable **Meeting Notification Email** settings to specify when emails should be sent and the recipients they should be sent to.
	In the **Meeting Rating Panel** section, enter a custom message. This message is included in the meeting feedback email when asking users to rate the meeting.
Calendar	Currently available for Managed Services Symphony as a Service (SYAS) customers only. Select the active calendar synchronization. Available types of calendar synchronization include: • No External Synchronization • Enable Exchange to Symphony Synchronization • Enable TMS Synchronization 　If this option is selected, select the synchronization direction that should be followed. Options include: • Symphony to TMS only • TMS to Symphony only • Bi-directional
Customization	Customize account portal logos, email logos, and Symphony Ticket field options that are available in drop down lists. For more information, see [Customizing Logos](#) and Customizing Ticket Fields.
LDAP	Select this option to enable and configure Lightweight Directory Access Protocol (LDAP) integration for an account. When LDAP integration is enabled, users can sign in to the portal using their LDAP single sign-on (SSO) credentials. For more information, see [Configuring Lightweight Directory Access Protocol (LDAP) Integration](#).
Entitlements	Select an option: • Licenses 　View the total number of Symphony licenses currently in use and the total number of licenses allotted to an account. These counts are shown for each service the account is entitled to. Expired entitlements are shown in red. These numbers cannot be modified and for informational purposes only. • Billing Codes 　View and manage the billing codes associated with an account. For more information, see [Billing Codes](#).

Category	Description

Tickets	Select an option to configure Adaptors and create custom ticket handling policies for this account. Options include:
	• Adaptor Configuration
	  Select an Adaptor and, if it can be configured, complete all configuration fields.
	
	  For more information, see [Configuring the Customer Ticketing Solution Adapter](#).
	• Closing Policies
	  Configure the options to automatically close tickets based on ticket rank (critical, major, minor), recurrence, incident rate, or ticket aging. Options include:
	• Automatically set open tickets to Pending Close when the issue is resolved
	• Automatically set Pending Close tickets to Closed
	• Automatically Close aging tickets
	
	  These options are inherited from the Global Configuration level. To override these options at the Account level:
	  1. Next to an option, select the ⊘ icon to break the inheritance.
	     The icon changes to ⊠.
	  2. Edit the option, as necessary.

Registration and Licenses	Set the default user registration method and the role assigned to all new users. Options include:
	• Allow users to self-register from the Symphony portal.
	  This can be limited to users with an email address that matches a specific domain. For example, all users with an email domain of @acme.com will automatically be allowed to self-register. Separate multiple domains with a comma.
	• Automatic Licenses Assignments (non-LDAP users)
	  Enables the account user roles to possess conferencing services.
	  Conferencing license options are:
	  • Premier Conferencing (default)
	    Allows the user to sign in to user portal and schedule meetings. For Managed Services Powered by Symphony, Users can contact AVI-SPL to schedule meetings and change schedules. Meetings that include a Producer and/or meeting attendance are charged regardless of Monitoring Service.
	  • None
	    No Symphony conferencing service.
	
	  These settings can be overridden at the User level. For more information, see [Managing Users](#).

External Video Cloud Services	With External Video Cloud Services (EVCS):

Category	Description
	• Managed rooms are dialed in to the EVCS. • Desktop links are added to meeting invites. • Limited Moderation capabilities. EVCS has a light and regular version. The EVCS using CMS/PEXIP offer more moderation tools than the light version. Symphony can schedule meetings on the following EVCS: • Zoom • WebEx • Cisco Managed Services (CMS) • Videxio • BlueJeans Each account can include multiple External Video Cloud Services (EVCS) and regular Multipoint Control Unit (MCU) service. After selecting an EVCS, enter the service configuration details. Options vary based on the type of EVCS selected.
Recording	Optional Service. Currently available for Managed Services Symphony as a Service (SYAS) customers only. View the recording and event (live streaming) settings for an account. These options are inherited from the Global Configuration level. To override these options at the Account level: 1. Next to an option, select the 🔗 icon to break the inheritance. The icon changes to ⊗. 2. Edit the option, as necessary.
Audit Trails	A report of all changes made within Symphony at the Account level, including who made the changes and the date and time the changes were made. <table><tr><td>**TIP** On the toolbar, • Select ⬒ to export the list to a csv file. • Select ⟳ to refresh the list and display real-time data. • Select ▢ to modify the columns displayed on the tab. • Select ▼ to filter the displayed data.</td></tr></table>

Category	Description
	Audit logs are also available in the Administration module when configuring the following: • Global Configuration • Users • Locations • Rooms • Devices For more information, see the linked topics above for each item.
Workflows	View and create activity-based workflows for specific rooms. Workflows allow multiple steps to be completed with the press of a button, providing automated and scheduled processes in combination with a monitoring trigger. For more information, see Workflows.

3. Select **Update**.
4. Repeat as necessary to configure additional categories.

Monitoring Restrictions and Triggers

Custom monitoring restrictions can be set to monitor devices and define restrictions for an account. When trigger conditions are met, a Ticket or Ticket event is generated to alert users of the situation. If a Ticket does not exist, a new Ticket is generated, and the new Ticket event is added to that ticket.

These options are inherited from the Global Configuration level but can be overridden at the Account, Location, Room, and Device level.

> **NOTE** Device monitoring information available to Symphony depends on what the device can offer.

Configuring Account Monitoring Triggers

This category contains the conditions that trigger alerts when monitoring Devices, Infrastructure Elements, Codecs, and AV Devices at the Account level.

> **NOTE** When creating triggers, be aware that Symphony does not validate Triggers against other active Triggers. Therefore, the possibility to create conflicting Triggers, either in multiple or the same Trigger, does exist.

1. In the left navigation pane, select **Administration** > **Configuration.**
   The **Configuration for *accountname*** page is displayed.
2. Select **Monitoring**.
3. Select **Account Monitoring Triggers**.

4. Do one of the following:

If…	Then…
Adding a new trigger,	In the upper-right toolbar, select ✚ . The **Add Trigger** window is displayed. For more information on the fields available on this window, see [Add/Edit Trigger Window.](#)
Editing an existing trigger,	In the **Trigger Name** column, select a trigger. The **Edit Trigger** window is displayed. For more information on the fields available on this window, see [Add/Edit Trigger Window.](#) If that trigger is inherited, it cannot be edited unless the inheritance is broken. At the top of the window, next to the 🔗 icon, click the link to break the inheritance.

5. Complete each field to indicate the requirements that will trigger an alert.
6. Select **OK**.

Add/Edit Trigger Window

The Add Trigger and Edit Trigger Windows contain the following fields that determine when a Ticket or Ticket event is opened and closed:

Field	Description
Trigger Name	Enter a descriptive name for this trigger configuration.
Trigger is active	To enable this trigger to run, select this check box. To save it in the Trigger library, but prevent it from running, clear the check box.
Apply To	Specifies what equipment this Trigger applies to, such as a specific device, all Codecs, all laptops, or AV Devices. When specifying what the trigger applies to, all items in that category can be targeted or specific ones. To limit the items being targeted, select additional criteria from the additional drop-down menus next to this field.
In	Select the location of the items that this trigger should apply to.
When	Select the issue and additional criteria that need to be met to trigger the event. For example, When the Communication Link is down. If **SNMP OID** or **Extended Property** is selected, operators are available for use with this condition. For more information see Logical Operators.
Alarm On	Select this checkbox to trigger the event if the following criteria are met. The options in this section are read-only unless this option is selected. If this is deselected after additional fields are completed, the selected options are not saved.
React	Specify when the event should be triggered, such as immediately or when the issue persists for a specified number of minutes. A delayed trigger allows small glitches in a device to be permitted for a specified period without generating a ticket.
Issue	Select the option that best describes the problem.

Field	Description
Comment	Enter a comment to be displayed when the event is triggered.
New Critical Ticket Event	Select this button to create a Critical ticket event when the specified criteria are met. If a Ticket already exists for the specified issue on the specified device, an additional event is added to the ticket; a new ticket is not created.
New Major Ticket Event	Select this button to create a Major ticket event when the specified criteria are met. If a Ticket already exists for the specified issue on the specified device, an additional event is added to the ticket; a new ticket is not created.
New Minor Ticket Event	Select this button to create a Minor ticket event when the specified criteria are met. If a Ticket already exists for the specified issue on the specified device, an additional event is added to the ticket; a new ticket is not created.
Start Workflow	Select this button to complete the selected action when the specified criteria are met. This option can be selected in addition to creating the ticket event specified above. If a Workflow is started, the **Alarm Off > Start Workflow** field must be completed. If an **Alarm Off > Start Workflow** condition is not defined, the workflow will be run only once, even if the issue still exists.
Alarm Off	Select this checkbox to clear the event when the following criteria are met. The options in this section are read only unless this option is selected. Therefore, if this option is not selected, the event will remain open until it is manually turned off since no criteria is set for stopping the event. If a Workflow is started, this field is required to define the conditions on when the workflow should stop. If the conditions are not set, the workflow will be run only once, even if the issue still exists.
When	Select the issue that and additional criteria for that issue to clear the event. For example, When the Communication Link is up. If **SNMP OID** or **Extended Property** is selected, operators are available for use with this condition. For more information see Logical Operators.
Clear Ticket Event	Select this button to clear the event when the above criteria are met. Enter a **Comment** to be displayed when the event is cleared.
Start Workflow	Select this button and select an action to be when the above criteria are met. This option can be selected in addition to the clearing the event option. This field is required if the **Alarm On > Start Workflow** field is completed.

Logical Operators
When creating Triggers, the following operators are available when either SNMP OID or Extended Property initiates a Trigger:

Operator	Format	Description	Example Use Case
Equal	String	The value of the field exactly matches the specified value. Cannot be used with text fields where the searched value is not the only one in the field.	When Extended Property #Microphone is equal to Disconnected

Operator	Format	Description	Example Use Case
Not Equal	String	The value of the field does not match the specified value. Cannot be used with text fields. This value will not return empty fields as part of the search results.	When Extended Property #Camera is not equal to Online
Less	Integer	The value of the specified field is less than the specified whole number value. Cannot be used with text fields. One value only.	When Extended Property #Brightness is Less than 5
More	Integer	The value of the specified field is greater than the specified whole number value. Cannot be used with text fields. One value only.	When Extended Property #Volume is More than 500
Any Value	Integer/ String	Any value, except an empty value, meets this condition.	When Extended Property #ErrorStatus exists
No Value	String	Any field that contains an empty or null value.	When Extended Property #Microphone is empty
In	String	The value of the specified field is one of multiple specified values. The values are specified as a comma-delimited list, surrounded by parentheses. This is equivalent to using multiple EQUALS statements but is shorter.	When Extended Property #ContentInput is in ["Unplugged", "Disconnected", "Unknown"]
Not in	String	The value of the specified field is not one of multiple specified values. This is equivalent to using multiple NOT EQUALS statements but is shorter.	When Extended Property #MTRStatus is Not In ["Healthy", "Online"]
Contains	String	The value of the specified field matches the specified value, either as an exact match or a "fuzzy" match. For use with text fields only.	When Extended Property #ErrorStatus Contains Error
Does Not Contain	String	The value of the specified field is not a "fuzzy" match for the specified value. For use with text fields only.	When Extended Property #Version Does not Contain Version 2

Monitoring Account Expiration Dates

Specify the number of days prior to the expiration date a Ticket event should be created and when that Ticket should be considered Critical. The Ticket event can be triggered for the following items:

- Device Warranty
- Device Lease/Service
- Room Service Contract

If a field is left blank, events are not generated for that expiration date.

> **TIP**   If a Ticket does not exist, a new Ticket is generated, and the new Ticket event is added to that ticket.

1. In the left navigation pane, select **Administration** > **Configuration**.
   The Configuration for *accountname* page is displayed.
2. Select Monitoring.
3. Select Expiration Dates.
4. Next to an option, select the 🔗 icon to break the inheritance.
   The icon changes to ⊗.
5. Enter the number of days, for each uninherited restriction, that will generate an alert, if reached.
6. Select **Update**.

Setting Account Monitoring Schedules

The monitoring schedule for an Account can be limited to specific days and times; monitoring can be paused during scheduled periods or indefinitely.

1. In the left navigation pane, select **Administration** > **Configuration**.
   The Configuration for *accountname* page is displayed.
2. Select **Monitoring**.
3. Select **Monitoring Restrictions**.
4. Next to an option, select the 🔗 icon to break the inheritance.
   The icon changes to ⊗.
5. Do the following, as needed:

To…	Then…
Limit the monitoring of the Account to a specified schedule,	Select the **Restrict Monitoring Schedule** check box and specify the days and hours that the Account should be monitored.
Allow the Account monitoring to be paused,	Select the **Allow to pause monitoring** indefinitely check box.
Temporarily stop generating tickets for device, locations, and rooms,	Select the **Block Monitoring Triggers** check box.

6. Select **Update**.

Filtering the Device Catalog List

The Device Catalog list can be filtered to display:
- Specific device types, such as Computers, Codecs, and AV Devices.

- All devices in a specific category, such as Bridges, Desktops, Gateways, or Amplifiers.
- The devices that are made by a specific manufacturer.
- Only those models that are actively deployed for the selected account.

1. In the left navigation bar, select **Administration > Configuration.**
   The Configuration for *accountname* page is displayed.
2. Select Device Catalog.
3. In the upper-right corner of the page, select ▼.
   The **Filters** page is displayed.
4. Select an option in one of the following filter criteria drop down lists:
   - Filter by type
   - Filter by category
   - Filter by manufacturer

   > **TIP**   Only one filter can be applied at a time.

5. To limit the filtered display, select the **Only show models active in this account** check box.
6. Select **OK**.
   The **Device Catalog** page is updated to display only those devices that meet the selected criteria.

To clear filters:
1. In the upper-right corner of the **Device Catalog** page, select ▼.
   The **Filters** page is displayed.
2. Select **Reset**.
3. Select **OK**.
   The **Device Catalog** page is updated to display all devices.

Auto-Retry Busy Endpoints

Symphony can automatically retry to connect to busy endpoints scheduled for a meeting. The auto-retry settings are configured at the Account level. By default, this feature is turned off.

Retrying to connect to busy endpoints can be performed when the meeting launches. Once the meeting starts, endpoints invited at meeting time also have the auto-retry capability.

Supported Multipoint Control Units (MCUs) include:
- Cisco Meeting Server (CMS)

> **NOTE**   For CMS, the participant is re-added to the meeting after the endpoint is disconnected. RMX disconnected participants are shown as disconnected before the retry.

- Pexip
- RMX (Poly)
- RealPresence Distributed Media Application (DMA)

To turn this feature on:

1. In the left navigation bar, select **Administration > Configuration.**
   The Configuration for *accountname* page is displayed.
2. Select Scheduling.
3. Select the Auto-retry busy endpoints check box.
4. Enter the maximum number of times to retry to connect.
5. Enter the number of minutes in between re-connection attempts.

Enabling the Never Auto-terminate V.I.P. Meetings Option

The **never auto-terminate V.I.P. meetings** option is configurable at the Account level. When a meeting is designated as a V.I.P. Meeting and this option is turned on, devices stay connected after the meeting ends. Producers must manually terminate the meeting. For example:

If…	Then…
the meeting end time does not exceed the scheduled end time,	the meeting still requires manual termination by a Producer.
A subsequent meeting tries to auto-connect to an endpoint which is still in use by the V.I.P. meeting,	the subsequent meeting endpoint receives an invite to the original V.I.P. meeting and can accept or decline the invitation.

NOTE	For RMX only, the property setting in the RMX MCU profile for auto-terminate must be set to **FALSE**. This setting ensures RMX will not auto-terminate the meeting and this feature works as described.
	Supported MCUs are:
	- RealPresence DMA
	- Cisco Meeting Server (CMS)
	- Pexip
	The global default configuration is **FALSE** which means V.I.P. meetings and devices are automatically terminated upon meeting completion.

To enable the never auto-terminate V.I.P. meetings feature for an account:

1. In the left navigation bar, select **Administration > Configuration.**
   The Configuration for *accountname* page is displayed.
2. Select Scheduling.
3. Select the Never auto-terminate V.I.P. meetings check box.
4. Select **Update**.

Sending V.I.P. Meeting Notifications

1. In the left navigation bar, select **Administration > Configuration.**
   The Configuration for *accountname* page is displayed.
2. Select Scheduling.
3. Select the Enable V.I.P. Meetings Notifications check box.
4. In the **Recipients** field, enter the email addresses for those who should receive a meeting notification.
5. In the **Notification Time (mins)** field, enter the number of minutes prior to a meeting the designated recipients should receive the email.
6. Select **Update**.

Customizing Logos

Images for the account portal and email logos can be customized.

1. In the left navigation bar, select Administration > Configuration > Customization.
2. Select Logo Customization.
   The **Logo Customization** page is displayed.
3. Under the image, select **Change**.
   The **Upload Logo** window is displayed.
4. Select **Logo** and browse for the correct image file.
5. Select **Upload**.
   The **Logo Customization** page is displayed and includes the new image.

> **NOTE** Changes are saved as they are made. Selecting **Cancel** does not discard the changes made. To revert to the previous logo for any field, next to the new logo, select 🗑 .

Customizing Ticket Fields

The following Ticket details can be customized, by account, to modify the default list to include only options relevant to that account:

- Issue Types
- Issue Sources
- Issue Resolutions

For example, if an issue type of CPU Usage does not apply to an account it can be omitted from the Issue Type selection list on the Ticket details.

Options can be selected from the default list settings to be displayed or omitted. Additional custom options can be manually created, or a list of multiple options can be imported from a file and created simultaneously.

1. In the left navigation bar, select Administration > Configuration > Customization.
2. Select Field Customization.
3. Select the **Issues** tab, review the options in each of the following sections:
   - Issue Types
   - Issue Sources
   - Issue Resolutions
4. In each section, do one of the following:

To…	Then
Include or omit options from the default list on the Ticket details window,	Select or clear the check box for each option to be included in or omitted from that menu.
Create a custom field option,	1. Next to the applicable field section, select ✛ . 2. Enter a name for the option. 3. Click **OK**. The option is added to the list within that category.
Import field options,	1. Next to the applicable field section, select ☁. The **Import *Category*** window is displayed. 2. Select **File…**. 3. Locate the file that contains the options and select **Open**. 4. Select **Upload**. The imported options are displayed in the list within that category.
Delete a field option,	1. In the applicable field section, select the check box for each option to be deleted. 2. Next to the applicable field section, select ▬ . A prompt is displayed confirming the deletion. 3. Select **OK**.

Customizing Room Types

The default list of room types when configuring a room can be customized to include only those room types that are applicable to an organization. The number of rooms assigned to each room type is displayed for quick reference when determining which room types might no longer apply.

1. In the left navigation bar, select Administration > Configuration > Customization.
2. Select Field Customization.
3. Select the **Room** tab.

   All available room types are displayed and indicate the number of rooms assigned to each room type.
4. Do one of the following:

To…	Then
Include or omit options in the default Room Type list,	Select or clear the check box for each Room type.
Create a custom room type,	1. Next to the applicable field section, select ✚ . 2. Enter a name for the option. 3. Click **OK**. The option is added to the list of room types and will be available when configuring a room and specifying the room type.
Import a list of room types,	1. In the upper-right toolbar, select ☁. The **Import Room Types** window is displayed. 2. Select **File…**. 3. Locate the file that contains the options and select **Open**. 4. Select **Upload**. The imported room types are displayed in the list and will be available when configuring a room and specifying the room type.
Delete a room type not currently in use,	1. Select the check box for each room type to be deleted. > **NOTE** Rooms assigned to a room type cannot be deleted. 2. In the upper-right toolbar, select ▬ . A prompt is displayed confirming the deletion. 3. Select **OK**. The deleted room types are no longer included in the Room Types list and will not be available when configuring a room and specifying the room type.

Configuring Lightweight Directory Access Protocol (LDAP) Integration

1. In the left navigation bar, select **Administration > Configuration > LDAP**.
2. To enable the LDAP server integration with Symphony for this account, select the **Enable LDAP Integration** check box.
3. Complete all fields, as necessary.

Field	Description
Secure LDAP	Select this check box to enable the LDAP server. LDAP servers can be on customer's premises which can be accessible from Symphony cloud.
Use CommProxy	Select this check box if the LDAP server is deployed on premises.
Server Hostname	Enter the IP address of the LDAP server.

Field	Description
Server Port	Enter the port number of the LDAP server.
User DN	Enter the Distinguished Name (DN) for connecting to LDAP. For additional details on LDAP references see the Microsoft Distinguished Names list.
	Example: CN=XXXXVMR,OU=Service Accounts,OU=Org,DC=YYYY,DC=LOCAL
User Password	Enter the password to connect to the LDAP server.
Confirm Password	Re-enter the password to connect to the LDAP server.
Search Bases	Enter the LDAP/Active Directory parameters and select ✚. The parameters include: • CN = Common Name • OU = Organizational Unit • DC = Domain Component Example: OU=Org,DC=XXXXXX,DC=LOCAL
Authentication Attribute	Enter the organization's authentication level that is used to determine user access.

4. Select **Update**.

Billing Codes

Default and Custom Billing Codes can be managed at the Account level.

Managing Default Billing Codes

By default, every account is assigned the following default billing codes, which can be kept active or made inactive, based on the needs of the Account:

Billing Code	Tracks and Reports
AVIAUDIOADDCONFUSG	Audio bridging (per minute)
AVIHSTBRDMINUSG	Sage of AVISPL MCU (per port/hour) Limit: 2
AVICONFATTENDUSG	Conference attendance (per minute/conference)
AVIRECORDINGUSG	Conference recording (per minute)

1. In the left navigation pane, select Administration > Configuration > Entitlements > Billing Codes.
    The default billing codes are displayed across the top of the **Billing Codes** page. Active billing codes include and inactive billing codes include .

2. Select a specific billing code.
    The **Edit Billing Code** window is displayed.

3. Do one of the following:
    • To deactivate the billing code, clear the **Active** check box.

- To activate the billing code, select the **Active** check box.
4. Select **OK**.

5. The billing code is updated to include or , based on the status of the code.

Adding Billing Codes

1. In the left navigation pane, select Administration > Configuration > Entitlements > Billing Codes.

2. In the upper-right toolbar, select + .
   The **Add Billing Code** page is displayed.

3. Enter the **Billing Code**.

4. Enter a **Description** for the billing code.

5. To activate the billing code and make it available for selection, select the **Active** check box.

6. To designate the billing code as a frequently used code, select the **Frequent** check box.

   > **TIP** Billing codes designated as **Frequent**, can be filtered when selecting a billing code during the meeting wrap up process. By designating a code as **Frequent**, it is added to the filtered list.

7. Select **OK**.
   The **Billing Codes** list displays the new billing code.

Editing Billing Codes

1. In the left navigation pane, select Administration > Configuration > Entitlements > Billing Codes.

2. Select a specific billing code.
   The **Edit Billing Code** window is displayed.

3. Update all fields, as necessary.

4. Select **OK**.
   The **Billing Codes** list is updated with the new billing code information.

Importing Billing Codes

Billing Codes can be batch imported from an .xls file. The file must contain the billing code and indicate **TRUE** (inactive) or **FALSE** (active) to set the status.

1. In the left navigation pane, select Administration > Configuration > Entitlements > Billing Codes.

2. In the upper-right toolbar, select .
   The **Import Billing Codes** window is displayed.

3. Select **File…**.

4. Locate the file that contains the billing codes and select **Open**.

5. Select **Upload**.

The billing codes are displayed in the **Billing Codes** list.

Configuring the Customer Ticketing Solution Adapter

To synchronize a third-party account ticketing solution, the Ticket Adapter must be enabled. Contact AVI-SPL to enable a ticketing solution if one is not available.

1. In the left navigation pane, select **Administration** > **Configuration** > **Tickets** > **Adapter Configuration**.
2. In the **Tickets Adaptor** drop down list, select **Customer Ticketing Solution**.
3. In the **Type** drop down list, select one of the following:
   - **TAL ServiceNow**
   - **ServiceNow**
   - **Email**
     The Customer Ticketing Solution adapter can be configured to send an email message to a distribution list when a ticket is created. The email message is based on the Symphony email templates engine and is customizable.
4. Complete all fields.

   Fields vary, based on the selected adapter type.

NOTE	**Ticket priority** depends on the account's ticket mapping. If an account does not have mapping, the default values used are based on Symphony tickets: Critical, Major, Minor, and Informational. If no priorities are entered, tickets with all priorities generate the email. If one or more priorities are entered, only tickets with those priorities generate emails. Separate multiple priorities with a comma.

5. Select **Update**.

Configuring External Video Cloud Services (EVCS)

An account can have one or more EVCSs configured.

1. In the left navigation pane, select **Administration** > **Configuration** > **External Video Cloud Services**.
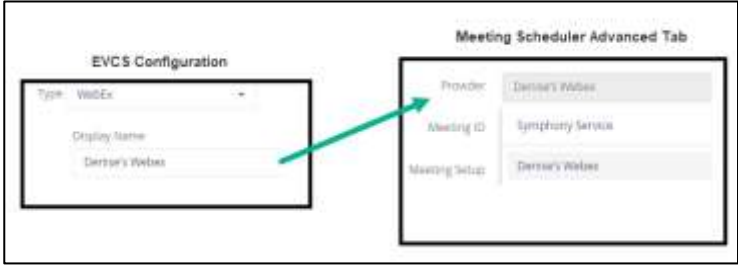
   The **External Video Cloud Service** page is displayed.
2. Click ✚ .

   The **Video Cloud Service** page is displayed.
3. In the **Type** field, select the type of EVCS being configured.
4. Complete the following fields, applicable to all EVCS types:

Field	Description
Display Name	Enter a descriptive name for this EVCS. When scheduling a meeting, this name is displayed and can be selected on the **Advanced** tab > **Provider** field.
	If this field is not specified, the **Type** is shown on the **Advanced** tab > **Provider** field, such as **WebEx**.

Field	Description
Phone Dial – In	Enter the dial-in name and phone number associated with the selected EVCS and select ✚ . The name and number combination is added to the box below this field. Multiple names and numbers can be added to this field.
SIP Domain	Enter the domain hostname that should be associated with this EVCS.
Desktop URL	The meeting link provided to participants to join a meeting.

5. Complete additional fields displayed based on the type of EVCS selected.
6. Click **Add**.

   The EVCS is listed in the **External Video Cloud Services** list.

Workflows

Activity-based workflows can be created for specific rooms or devices. Multiple steps can be completed simultaneously based on a schedule, the result of an Event trigger, or manually.

There are three types of workflows available in Symphony:

Workflow	Description
Action	A manual task is performed on a Room and can be started from the Room Controller View. For example, creating a workflow to prepare a room for a meeting by setting the temperature, lowering the shades, and turning the lights on provides an automated process to complete common tasks quickly anywhere within the organization.
Automation	A manual task is performed on a Room based on the predetermined date and time assigned to the workflow.
Healing	The workflow is started from a trigger with the purpose of fixing room and device issues. When creating a Monitoring Trigger to start a workflow, the workflows available in the **Start Workflow** list are the Healing Workflows created here.

The Workflow list includes all active and inactive workflows. Only the most recent version of the workflow is included in the list. The **Last Run Date** column displays the date and time the workflow was last run. Selecting the date and time link displays a log of each time that workflow ran and includes the date it ran, the name of the person who created it, the status of the workflow for that date and time, and any errors encountered.

Creating Workflows

> **NOTE** Workflows should only be created by users with a thorough understanding of the account locations, room configurations, and device properties.

1. In the left navigation pane, select **Administration** > **Configuration** > **Workflows**.
   The **Workflows** page is displayed.

2. In the upper-right toolbar, select + .
   The **Add Workflow** page is displayed.

3. Select the type of workflow being created and click **OK**.
   The **Workflow Modeler** page is displayed.

4. Do one of the following:
   - To create a new diagram, select **Create a new diagram**.
     A new workflow is displayed and includes a StartEvent.
   - Drag and drop a Business Process Model and Notation (BPMN) diagram file on the page and go to step 7.

5. Select and drag the 🎯 icon from the toolbar to the page to specify the room and location that this process flow should be performed in.

   > **NOTE** For Action and Automation workflows only, this step is required in the workflow. If the workflow does not include a Room, the workflow will not be saved, and an error is displayed. Only one room can be included in a process flow. After the room is added to the diagram, the 🎯 icon is no longer accessible.

6. Complete the following fields:
   - Name
   - Select Location
     This field is not required for Healing workflows.
   - Select Room
     This field is not required for Healing workflows.

7. Select and drag additional process steps, as applicable, from the toolbar to the page and complete the Configuration fields displayed for each activity.

Process Step	Description	Configuration Fields
◯	Create StartEvent. Indicates the beginning of the process.	Optionally, specify a **Name** for this step, such as **Meeting Preparation**.

| Process Step	Description	Configuration Fields
⭕	Create EndEvent. Indicates the end of the process.	Optionally, specify a **Name** for this step, such as **End Process**.
◇	Create a Gateway, which is a decision point to indicate if the requested action was completed successfully. Gateways can only be added after the 🩺 activity. When the gateway has another step after it, the Gateway is given a **Condition Succeeded** and **Condition Failed** path, so the next activity is based on the results of the verification.	Optionally, specify a **Name** for the Gateway.
◎	Wait for a specified duration.	Specify the **Duration to wait in seconds**, which is the number of seconds to wait before moving on to the next step in the process.
🎮	Control a device in the specified room. For example, the device can be configured to change the language used by that device for a meeting.	• Name Optionally, specify a name for this step in the process. For example, **Configure Language**. • Select Device Select the device that is included in this process. For example, **Barco ClickShare**. • Select Property Specify the aspect of the device that is being controlled as part of this process. For example, **Language**. • Value Select the property setting for the device. For example, **Spanish**.
🩺	Verifies a device was controlled as configured during the 🎮 activity step. For example, if the device was configured to change the language, this activity step confirms that the language was changed to the correct language.	• Name Optionally, specify a name for this step in the process. • Select Device Select the device that is being verified in this process. • Select Property Specify the aspect of the device that is being verified as part of this process. • Operator Select an Operator condition that must be met as part of this process. • Value Select the value being verified for the device.

Process Step	Description	Configuration Fields
	Send a message to meeting participants. For example, prior to the start of a meeting, the workflow can be used to send a message to all attendees, notifying them that the meeting will begin in 10 minutes.	• **Name** Optionally, specify a name for this step in the process. • **To** Enter the email addresses, separated by a comma, for all recipients. • **Subject** Enter the Subject for the message. • **Text** Enter the message content.

> **TIP**   Steps can be used in any order and repeated.

8. Between each step, select on the first step, select , and select on the next step.

   The two steps are connected with an arrow.

> **TIP**
> - To add a comment to a selected step, select and enter a comment.
> - To delete a step, select the step and select .

9. Select **Save**.

   The **Save Workflow** window is displayed.

10. Complete the following fields:
    - Name
      Enter a unique name for this workflow.
    - Version
      Enter a version number for this workflow.
    - Description
      Enter a more descriptive explanation of the purpose for this workflow.

11. To make the workflow available to users, select the **Active** check box.

12. Select **OK**.

Downloading Workflows

1. In the left navigation pane, select **Administration** > **Configuration** > **Workflows**.
   The **Workflows** page is displayed.

2. Select a workflow.
   The workflow diagram is displayed.

3. Scroll to the bottom of the page.

4. Select the button corresponding to the file type that should be downloaded:
   - BPMN diagram

- SVG image

The selected file type is downloaded.

Deleting Workflows

Workflows can be deleted individually or in batches.

1. In the left navigation pane, select **Administration** > **Configuration** > **Workflows**.
   The **Workflows** page is displayed.
2. Select the check box next to the workflows that should be deleted.

> **TIP** To select all workflows in the list, select the check box at the top of the check box column. Clear the check box for any workflow that should not be deleted.

3. In the upper-right corner of the page, select ⁻.
   A **Warning** is displayed confirming the deletion of the selected workflows.
4. Select **OK**.
   The **Workflows** page is displayed, and the deleted workflows are no longer displayed.

Running Workflows

After a workflow is created it can be run at any time to automate the designated process.

1. In the left navigation pane, select **Administration** > **Configuration** > **Workflows**.
   The **Workflows** page is displayed.
2. Next to a workflow, select the **Target** room.
   The Room details are displayed in three sections: **Information**, **Room Controls** and **Devices**.
3. In the **Devices** section, select ⚙.
   The **Advanced Controls** are displayed.
4. Select Activities.
   All workflows are displayed.
5. Next to a workflow, select **Run**.
   When the workflow is complete, the last column displays the status: **Success** or **Failed**.

> **TIP** If the workflow fails, hover over the status to display details on why the workflow failed.

Managing Users

After a user's account is created and registered, roles and capabilities are assigned to the user which determine the functionality available. Users can be linked to one or more accounts if the account has Channel visibility enabled for the role.

If an account has conferencing services, then users need to be added to the account in one of the following ways:

- Self-Registration

  Users can register their own user account.

- Self-Activation

  Administrators add the email address of a user. Then the user receives an email with a link to enter additional information to activate their account.

- Manual Registration

  Administrators enter all the information for a user, including a password.

Viewing Users

To view a list of users associated with an account:

- In the left navigation pane, select **Administration** > **Users**.

  The **Users** page is displayed, including all users and account information for each user. Additional details about each user can be viewed by selecting a user's email address.

> **TIP**
> To refresh the list and display real-time data, on the toolbar, select ⟳.

Creating User Profiles

1. In the left navigation pane, select **Administration** > **Users**.
   The **Users** page is displayed, including all users and account information for each user.

2. Select the [+] icon.
   The **Add User** page is displayed.

3. On the **Information** tab, complete the following fields:

Option	Description
Username (Email)	The user's email address, which will be used to sign into Symphony.

User is active	To register the user and provide an assigned password:
	1. Select this check box
	2. Complete all remaining fields on the page to register the user.
	3. Complete information on remaining tabs:
	  • Capabilities (Roles)
	  • Conferencing

Option	Description
User will self-activate	The user enters all their own profile information into the portal upon registration.
	When selected, all fields, except for the email address, are disabled. The user receives an email containing instructions to set a password and enter their profile information.
Send Welcome Email	To send the new user an email, select this checkbox. This email contains a link for the user to complete the registration process. This link expires in 24 hours.

4. Update fields, as necessary on the following tabs:

Tab	Description
Capabilities	This requires the **can assign roles to users** permission. Set the role of the user.
Conferencing	Set the conferencing services that the user is entitled to.
	If the account has Symphony Bridging Services with Personal Audio-Conferencing Service, select the **User has a personal audio conferencing room** check box to add the user's personal audio-conferencing codes and PIN.
	NOTE If the user will self-activate option is enabled, the user assigns their own PIN access codes upon registration.

5. Select **Add.**

Registration Workflow
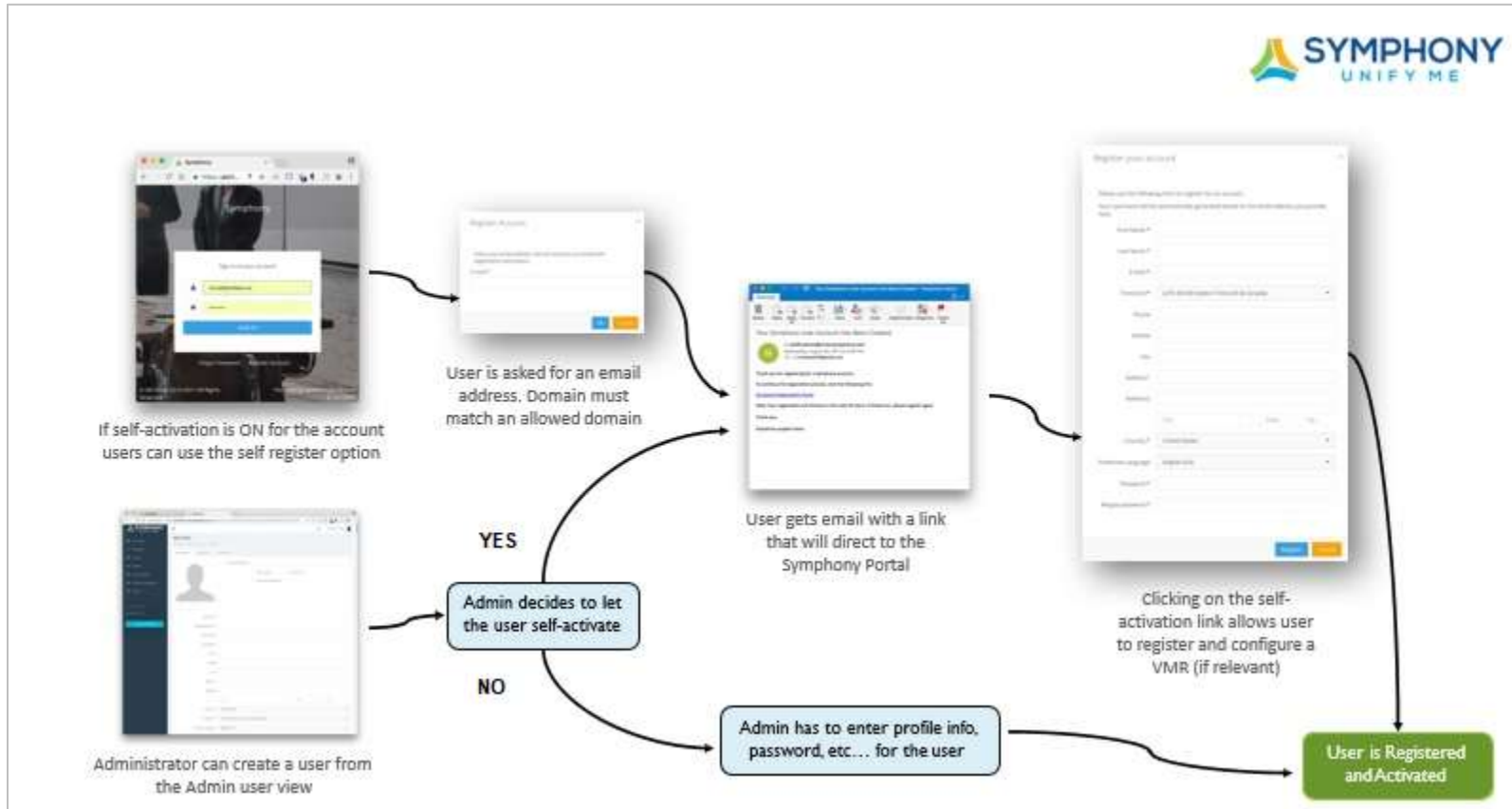
Updating User Profiles

Administrators can manage users by viewing and updating their personal and conference settings.

1. In the left navigation pane, select **Administration** > **Users**.
   The **User list** is displayed.
2. Select a username (email).
3. Update user information on each of the following tabs:
   - **Information**
     This tab includes the user's identifying information such as name, address, time zone, Department, and Supervisor's name.

     By default, the user's profile picture, displayed in the left navigation pane, includes a circle with the user's initials in them. The user's profile picture can be changed on this tab to show a picture, instead of the initials. To replace the initials with a picture, under the existing profile picture, select **Change** and upload a new picture. The profile picture is displayed next to their username in the user list. The user's profile is updated to show the image instead of the user's initials.
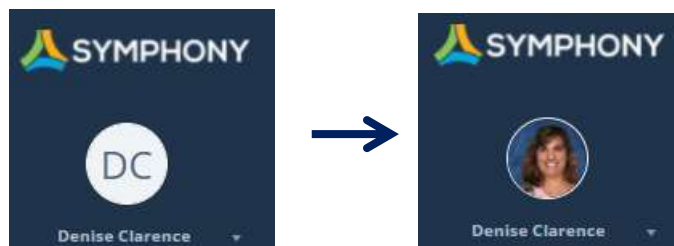
   - **Capabilities**
     This tab indicates the user's currently assigned role. The role can be changed by selecting a new role from the drop-down menu.
   - **Conferencing**
     This tab indicates the user's conferencing settings such as their assigned Moderator's code and if the user has a personal conferencing room, those details are entered and displayed here.
4. Select **Update**.

Change a User's Password

Users can create and change their own password, as needed. However, it may be necessary for an Admin to change a user's password.

Passwords must meet the following requirements:
- At least 8 characters
- A mixture of both uppercase and lowercase letters
- A mixture of both letters and numbers
- Include at least one special character, such as !, @, #, and }

1. In the left navigation pane, select **Administration > User**.
2. Select a username (email).
3. On the bottom of any tab, select **Change Password**.
   The **Reset Password** window is displayed.
4. Enter the new password twice.
5. Select **Change**.

Resend Welcome Email Message

1. In the left navigation pane select **Administration > User**.
2. Select a username (email).
3. On the bottom of any tab, select **Resend Welcome Email.**
   A message is displayed confirming the email message was resent.

Batch Importing Users

Users can be batch imported by uploading an .txt or .csv file containing records for multiple users. The file must contain only one email address per line.

1. In the left navigation pane, select **Administration > User**.
2. Select the ☁ icon.
   If the self-registration option is turned on for the account, then the **User will self-activate** option is automatically enabled for all imported users. An email is sent to all users with instructions to set a password and enter their profile information.
3. Select the **.csv** or **.txt** file containing the users' email address.
4. Select **Upload**.

Viewing a User's Audit Trail

1. In the left navigation pane, select **Administration > Users**.
   The **User** list is displayed.
2. Select a username (email).
3. On the **Edit User** page, select the **Audit Trails** tab.
   All actions taken by the selected user are displayed.

> **TIP**   On the toolbar,
>
> - Select ⬚ to export the list to a csv file.
> - Select ↻ to refresh the list and display real-time data.
> - Select ▢ to modify the columns displayed on the tab.
> - Select ▼ to filter the displayed data.

Managing Locations

Adding Locations

1. In the left navigation bar, select **Administration > Locations.**
   The **Location** page is displayed.

2. Select the [+] icon.

   The **Add Location** page is displayed.

3. Complete the following fields, as necessary:
   - **Name**
   - **Short Name**
   - **Location is active**
     This field indicates whether the location displays for the Symphony Meeting scheduler and if Monitoring restrictions are actively enforced for the location.
     Select the check box if the location is available. Clear the check box if the location should not be available and when configuring rooms or devices in this location to prevent ticket generation.
   - **Address 1**
   - **Address 2**
   - **Country**
   - **Timezone**
   - **Reference IP Address**
   - **Geo Location**
     This field allows Symphony to position the location on the Map Views for meetings and devices.
     If this field is set to **Automatic**, Symphony automatically retrieves coordinates from the location address.
     If this field is set to **Manual**, the longitude and latitude for the location are specified by the user.
   - **Contact Name**
   - **Contact Email**
   - **Contact Phone**

4. Do one of the following:
   - To add this room, select **Add**.
     The **Locations** page is displayed and includes the new location.
   - To add this location and additional locations, select and hold **Add** and then select **Add and create another location**.
     The **Add Location** page is displayed.

Editing Location Details

The details for any location can be modified. Locations can be changed from active to inactive at any time.

1. In the left navigation bar, select **Administration > Locations**.
2. Select a **Location** name.
   The **Edit Location** window is displayed.
3. On the Information tab, update the following fields, as necessary:
   * Name
   * Short Name
   * Address 1
   * Address 2
   * Country
   * Timezone
   * Reference IP Address
   * Geo Location
   * Contact Name
   * Contact Email
   * Contact Phone
4. If the location is no longer active, clear the **Location is active** checkbox.
5. Select **Update**.
   The **Locations** window is displayed.

Updating the Location Image

1. On the **Locations** page, select a **Location** name.
   The **Edit Location** window is displayed.
2. Under the image, select **Change**.
   The **Upload Logo** window is displayed.
3. Select **Logo** and browse for the correct image file.
4. Select **Upload**.
   The **Edit Location** window is displayed and includes the new image.
5. Select **Update**.

Configuring Location Monitoring Triggers

A location's default monitoring triggers and restrictions, set at the Global or Account level, can be modified to meet the needs of a specific location.

1. In the left navigation pane, select **Administration > Locations**.
2. At the end of the location row that needs to be updated, select and select **Configuration**.

The **Monitoring** page is displayed.

3. Select Location Monitoring Triggers.
4. Do one of the following:

If…	Then…
Adding a new trigger,	In the upper-right toolbar, select ✚ . The **Add Trigger** window is displayed. For more information on the fields available on this window, see [Add/Edit Trigger Window.](#)
Editing an existing trigger,	In the **Trigger Name** column, select a trigger. The **Edit Trigger** window is displayed. For more information on the fields available on this window, see [Add/Edit Trigger Window.](#) If that trigger is inherited, it cannot be edited unless the inheritance is broken. At the top of the window, next to the 🔗 icon, click the link to break the inheritance.

5. Complete each field to indicate the requirements that will trigger an alert.
6. Select **OK**.

Monitoring Location Contract and Warranty Expiration Dates

1. In the left navigation pane, select **Administration > Locations**.
2. At the end of the location row that needs to be updated, select ⋮ and select **Configuration**.
   The **Edit Location** page is displayed.
3. Select the Service Contracts & Warranty tab.
4. Next to an option, select the 🔗 icon to break the inheritance.
   The icon changes to ⊗ .
5. Enter the number of days, for each uninherited restriction, that will generate an alert, if reached.
6. Select **Update**.

Restricting Location Monitoring Schedules

The monitoring schedule for a Location can be limited to specific days and times.

1. In the left navigation pane, select **Administration > Locations**.
2. At the end of the location row that needs to be updated, select ⋮ and select **Configuration**.
   The **Edit Location** page is displayed.
3. Select the **Monitoring Restrictions** tab.

4. Next to the **Restrict Monitoring Schedule** check box, select the ⛓ icon to break the inheritance. The icon changes to ⛓̸.
5. Select the **Restrict Monitoring Schedule** check box.
6. In the **Monitor every week on** field, select the days the Location should be monitored.
7. In the **From** and **Until** fields, select the hours that the Location should be monitored.
8. Select **Update**.

Pause Ticket Generation for Locations

The settings for monitoring locations that result in generating tickets are inherited from the Global and Account levels. However, this can be changed to temporarily stop generating tickets for a location. Monitoring of the location will continue but tickets are not generated when the triggers are met.

This is most helpful if system maintenance is being performed at a specific location that will result in many tickets to be generated.

1. In the left navigation pane, select **Administration > Locations**.

2. At the end of the location row that needs to be updated, select ⋮ and select **Configuration**. The **Edit Location** page is displayed.

3. Select the **Monitoring Restrictions** tab.

4. Next to the **Block Monitoring Triggers** check box, select the ⛓ icon to break the inheritance. The icon changes to ⛓̸.

5. Select the **Block Monitoring Triggers** check box.

6. Select **Update**.

> **TIP** To resume ticket generation when a monitoring trigger is reached, clear the **Block Monitoring Triggers** check box and select the ⛓̸ icon to resume inheritance. The icon changes to ⛓ .

Deleting Locations

1. In the left navigation pane, select **Administration > Locations**.
2. Select the check box next to the location that should be deleted.

> **TIP** To delete all locations, select the top checkbox in the column.

3. On the top-right toolbar, select ▬ .

A **Warning** is displayed confirming the selected location should be deleted.

4. Select **OK**.

Batch Importing Locations

Locations can be batch imported by uploading an .xls or .csv file containing records for multiple locations. The file must only contain location records. For example, the list cannot contain records for both locations and devices.

If a record for a specific location already exists, the fields are updated with the imported information; a new record is not created. Only fields present in the file are updated; existing fields are not changed if they are not included the file. If a field has no value in the imported file, the record is updated to remove that field.

1. In the left navigation pane, select **Administration > Locations**.
2. Select the ☁ icon.
   The **Import Locations** window is displayed.
3. Select the .csv or .xls file containing the records that should be imported.
4. Select **Upload**.

Viewing a Location's Audit Trail

1. In the left navigation pane, select **Administration > Location**.
   The **Locations** list is displayed.
2. Select a location.
3. On the **Edit Location** page, select the **Audit Trails** tab.
   All changes made to the selected location are displayed.

> **TIP** On the toolbar,
>
> - Select 🖺 to export the list to a csv file.
> - Select ↻ to refresh the list and display real-time data.
> - Select ⊡ to modify the columns displayed on the tab.
> - Select ▼ to filter the displayed data.

Managing Rooms

Adding Rooms

1. In the left navigation bar, select **Administration > Rooms.**
   The **Room** page is displayed.

2. On the top-right toolbar, select the ⊞ icon.

   The **Add Room** page is displayed.

3. On the **Information** tab, complete the following fields, as necessary:

Field	Description
Name	Enter a detailed name of the room.
Short Name	Enter a short name for the room, or nickname.
Location	Select the location that contains this room. Locations are obtained from the Location module. For more information, see <u>Managing Locations</u>.
Managed Room	This field determines whether the Operations center is managing the room and the associated devices. For Cisco Telepresence Management Suite (TMS) synchronization & monitoring devices associated with the room, this check box must be selected.
Public Room	Indicate if this room is a publicly available room to anyone.
Room is certified	Select this check box if the room has already been certified.
In Service	This field indicates whether Monitoring restrictions are actively enforced for the rooms and devices. Clear the check box if the location should not be available and when configuring rooms or devices in this location to prevent ticket generation. For TMS synchronization & monitoring devices associated with the room, this check box must be selected.
Room is V.I.P.	Select this check box to identify the room or the devices in the room as a V.I.P.
Configuration Item ID	Enter the "sys_id" of the "cmdb_ci" record found in ServiceNow. This allows for automatic mapping of the room ID to the correct Room when an incident is opened in ServiceNow.
Room Number	If applicable, enter the physical room number used to identify the room.
Room Type	Select the type of room being added.
Capacity	The maximum number of people allowed in the room.

Scheduling Option	This field indicates whether the room is used for Symphony meeting scheduling. Options include:
	• VC Scheduling
	  The room can be used for video conferencing with Symphony.
	• Room Only Scheduling
	  The room is available for Symphony Meeting Web Scheduling but there are no devices associated with the room that Symphony launches, monitors, or utilizes.
	• None
	  The room is not available with Symphony Meeting Web Scheduler.

TMS ID	Applies only when VC Scheduling is selected and the Cisco TelePresence® Management Suite (TMS) is used. Enter the device ID.
Exchange ID	Applies only when VC Scheduling is selected, and MS Exchange is used. Enter the Exchange ID.
Third Party ID	

Field	Description
Service Contract Expiration	The expiration date for the service contract associated with this room. This field is monitored using the expiration date configuration. When the expiration date restrictions are violated, a ticket can be generated. If the field is empty, no monitoring is performed.
Contact Name	The name of the primary contact for this room.
Contact Email	The email address of the primary contact for this room.
Contact Phone	The phone number of the primary contact for this room.
Notes	Additional details people should know regarding this room.
Room Camera URL	A hyperlink for a camera, such as an IP camera, or other devices associated with a room.
Control Panel URL	A hyperlink for the device's administrative control panel. This will add a **Control Panel** button on the Room details page to open the URL directly from within Symphony.

4. Do one of the following:
   - To add this room, select **Add**.
     The **Rooms** page is displayed and includes the new room.
   - To add this room and additional rooms, select and hold **Add** and then select **Add and create another room**.
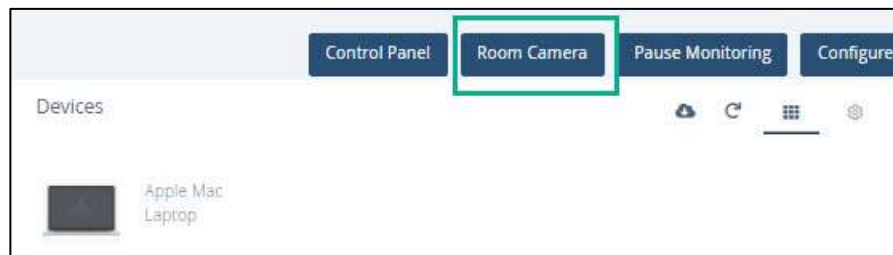   The **Add Room** page is displayed.

Editing Room Details

1. In the left navigation bar, select **Administration > Rooms.**
   The **Rooms** page is displayed.
2. Select a room name.
   The **Edit Rooms** window is displayed.
3. On the **Information** tab, update the following fields, as necessary:
   - **Name**
   - **Short Name**
   - **Location**
   - **Managed Room**
   - **In Service**
   - **Public Room**
   - **Room is V.I.P.**
   - **Room is certified**
   - **Configuration Item ID**
   - **Room Number**
   - **Room Type**
   - **Capacity**
   - **Scheduling Option**

- **TMS ID**
- **Exchange ID**
- **Third Party ID**
- **Service Contract Expiration**
- **Contact Name**
- **Contact Email**
- **Contact Phone**
- **Notes**
- **Room Camera URL**

> **TIP** Add a camera URL, such as an IP camera, or other devices associated with a room.
>
> This will add a **Room Camera** button on the Room details page to connect with the camera for the selected room.
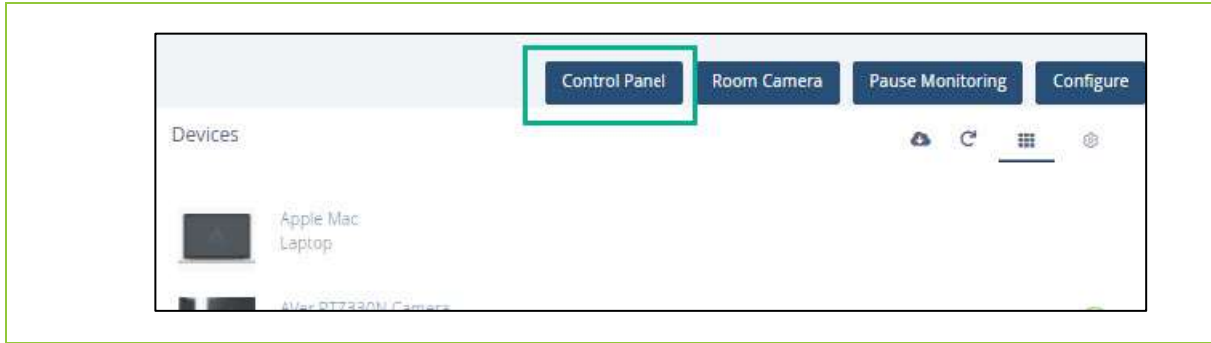>
>
>
> The camera can also be opened from the **Meetings List** details. The icon is displayed next to the room name.
>
>

- **Control Panel URL**

> **TIP** Add a URL, such as a device's administrative control panel.
>
> If a URL is specified, **a Control Panel** button is visible on the Room details page to open the URL in another browser tab.

4. Select **Update**.

The **Rooms** window is displayed.

Updating the Room Image

1. In the left navigation pane, select **Administration > Rooms**.
2. Select the room name that needs to be updated.

The **Edit Room** window is displayed.
3. Under the image, select **Change**.

The **Upload Logo** window is displayed.
4. Select **Logo** and browse for the correct image file.
5. Select **Upload**.

The **Edit Room** window is displayed and includes the new image.
6. Select **Update**.

Downloading a Room's QR Code

Each room has a unique QR code that can be downloaded, printed, and posted in a room or shared with users. Meeting attendees can scan the code to access the room details.

1. In the left navigation pane, select **Administration > Rooms**.
2. Select a room.

The **Edit Room** window is displayed.
3. On the **Information** tab, double-click the room image.

A QR code is displayed.
4. Select **Download**.

The QR code is downloaded as a .png file.

Configuring Room Monitoring Triggers

A room's default monitoring triggers, set at the Global, Account, or Location level, can be modified to meet the needs of a specific room.

1. In the left navigation pane, select **Administration > Rooms**.

2. At the end of the location row that needs to be updated, select [icon] and select **Configuration**. The **Edit Room** page is displayed.

3. On the **Triggers** tab, do one of the following:

If…	Then…
Adding a new trigger,	In the upper-right toolbar, select **+** . The **Add Trigger** window is displayed. For more information on the fields available on this window, see [Add/Edit Trigger Window.](#)
Editing an existing trigger,	In the **Trigger Name** column, select a trigger. The **Edit Trigger** window is displayed. For more information on the fields available on this window, see [Add/Edit Trigger Window.](#) If that trigger is inherited, it cannot be edited unless the inheritance is broken. At the top of the window, next to the [icon] icon, click the link to break the inheritance.

4. Complete each field to indicate the requirements that will trigger an alert.

5. Select **OK**.

Restricting Room Monitoring Schedules

Rooms can be monitored based on the Location, Account, or Global monitoring settings or they can be restricted to limit the monitoring to specific days and times, regardless of inherited settings.

1. In the left navigation pane, select **Administration > Rooms**.

2. At the end of the location row that needs to be updated, select [icon] and select **Configuration**. The **Edit Room** page is displayed.

3. On the **Monitoring Restrictions** tab, select the [icon] icon to break the inheritance. The icon changes to [icon].

4. Specify the days and hours that the Room should be monitored.

5. Select **Update**.

Pause Ticket Generation for Rooms

The settings for monitoring rooms that result in generating tickets are inherited from the Global, Account, and Location levels. However, this can be changed to temporarily stop generating tickets for a room. Monitoring of the room will continue but tickets are not generated when the triggers are met.

This is most helpful if work is being performed on a specific room that will result in many tickets to be generated.

1. In the left navigation pane, select **Administration > Rooms**.

2. At the end of the location row that needs to be updated, select ⋮ and select **Configuration**. The **Edit Room** page is displayed.

3. Select the **Monitoring Restrictions** tab.

4. Next to the **Block Monitoring Triggers** check box, select the 🔗 icon to break the inheritance. The icon changes to ⛓.

5. Select the **Block Monitoring Triggers** check box.

6. Select **Update**.

> **TIP** To resume ticket generation when a monitoring trigger is reached, clear the **Block Monitoring Triggers** check box and select the ⛓ icon to resume inheritance. The icon changes to 🔗 .

Monitoring Room Expiration Dates

1. In the left navigation pane, select **Administration > Rooms**.

2. At the end of the location row that needs to be updated, select ⋮ and select **Configuration**. The **Edit Room** page is displayed.

3. On the **Service Contracts & Warranty** tab, next to an option, select the 🔗 icon to break the inheritance. The icon changes to ⛓.

4. Enter the number of days, for each uninherited expiration date, that will generate an alert, if reached.

5. Select **Update**.

Deleting Rooms

1. In the left navigation pane, select **Administration > Rooms**.

2. Select the check box next to the location that should be deleted.

> **TIP** To delete all locations, select the top checkbox in the column.

3. On the top-right toolbar, select ▬ . A **Warning** is displayed confirming the selected room should be deleted.

4. Select **OK**.

Batch Importing Rooms

Rooms can be batch imported by uploading an .xls or .csv file containing records for multiple locations. The file must only contain room records. For example, the list cannot contain records for both devices and rooms.

If a record for a specific room already exists, the fields are updated with the imported information; a new record is not created. Only fields present in the file are updated; existing fields are not changed if they are not included the file. If a field has no value in the imported file, the record is updated to remove that field.

1. In the left navigation pane, select **Administration > Rooms**.
2. Select the ☁ icon.
   The **Import Rooms** window is displayed.
3. Select the .csv or .xls file containing the records that should be imported.
4. Select **Upload**.

Viewing a Room's Audit Trail

1. In the left navigation pane, select **Administration** > **Rooms**.
   The **Rooms** list is displayed.
2. Select a room.
3. On the **Edit Room** page, select the **Audit Trails** tab.
   All changes made to the selected room are displayed.

> **TIP** On the toolbar,
>
> - Select 🗎 to export the list to a csv file.
> - Select ⟳ to refresh the list and display real-time data.
> - Select ▯ to modify the columns displayed on the tab.
> - Select ▼ to filter the displayed data.

Managing Devices

Adding Devices

1. In the left navigation bar, select **Administration > Devices.**
   The **Devices** page is displayed.
2. On the top-right toolbar, select the ➕ icon.

The **Add Device** page is displayed.

3. Complete all fields on the following tabs, as necessary:
   - **Information**
   - **Properties**
   - SNMP
   - Comments

> **NOTE** The following tabs are displayed but cannot be selected and configured when adding devices:
> - Triggers
> - Monitoring Restrictions
> - Service Contracts & Warranty
>
> These values are dependent on the type of device added and the current Account level settings. They can be modified after the devices is added. For more information, see <u>Editing Devices</u>.

4. Do one of the following:
   - To add this device, select **Add**.
     The **Devices** page is displayed and includes the new device.
   - To add this device and additional devices, select and hold **Add** and then select **Add and create another device**.
     The **Add Device** page is displayed.

Editing Device Details

The device information and properties can be specified by the user when the device is added. However, the monitoring restrictions and SNMP settings are automatically applied to the device when it is added based on the Account settings and the device type. A device's default monitoring restriction, set at the Global or Account level, can only be modified for each specific device after the device is added**.**

1. In the left navigation bar, select **Administration > Devices.**
   The **Devices** page is displayed.
2. Select a device name.
   The **Edit Device** window is displayed.
3. Update details on the following tabs, as necessary:
   - **Information**
   - **Properties**
4. Select **Update**.
   The **Devices** window is displayed.

Add/Edit Device | Information Tab

Field	Description
Logo file	This logo can be changed. For more information, see <u>Updating the Device Image</u>.

Field	Description
Name	Required. This field can be any name but should indicate the device type, make, model, and owner. If adding a Cloud Connecter (CommProxy), include **CommProxy** in the name.
Type	Required. This is a general term for what the device represents. Select from the following options. • For Controllers: **AV Devices** • For Devices: Codecs, AV Devices, Infrastructure, or Unknown. • For Symphony supported Codecs, profile as usual. • If adding a Cloud Connecter (CommProxy), this value must be **Infrastructure**.
Category	Required. Further identifies the type of device. Options vary based on the **Type** selected. • If the device does not fit into any category, select **Generic**. • If adding a Cloud Connecter (CommProxy), select **Proxy**.
Manufacturer	Required. Identifies the device manufacturer. Options vary based on the **Type** and **Category** selected. • If the manufacturer is not listed, select **Other**. • If adding a Cloud Connecter (CommProxy), select **AVI-SPL**.
Model	Required. Identifies the model of the device. Options vary based on the **Type**, **Category**, and **Manufacturer** selected. • If the manufacturer is **Other**, select **Generic** or **Unknown**. • If adding a Cloud Connecter (CommProxy), select **Symphony CommProxy**.
Device is active	This field indicates whether the device displays for the Symphony Meeting scheduler and if Monitoring restrictions are actively enforced for the device. Select the check box if the device is available. Clear the check box if the device should not be available and when configuring the device to prevent ticket generation.
Device is V.I.P.	Select this check box to identify the device as a V.I.P.
Device is Call Capable	Select this check box to indicate that a device, such as a laptop or tablet, is capable of participating in meetings. Clear the check box to designate the device does not have the ability to connect to a meeting.
Location	Required. Select the physical location where the device resides.
Room	Required. Select the Room where the device is located.
Monitoring Service	Required. Specify the type of monitoring that should be done by Symphony: • **None** • **Simple Monitoring** Dependent on the Monitoring Source. Symphony pings the device to confirm it is either online or offline or SNMP support, which may provide additional alert-based information, such as low projector bulb life or overheating. • **Rich Monitoring** Includes Simple Monitoring and supports API, Login, and provides multiple monitoring statistics.

Field	Description

Monitoring Source	Required. Dependent on the Monitoring Service and defines how the location is monitored. Options include:
	• **Symphony Direct**
	  Communicates from the Cloud Connector (CommProxy) to device.
	• **Room Controller**
	  Communicates from the Cloud Connector (CommProxy) to room devices.
	
	> **NOTE** Use the Cloud Connector (CommProxy) when configuring a separate Codecs entity.
	
	• **3rd Party Management**
	  Communicates with the third-party management application to the device.
	• **AVI-SPL Monitoring Agent**
	  The AVI-SPL monitoring agent is deployed on a network device and does not use the Cloud Connector (CommProxy).
	• **Symphony Direct & Room Controller**
	• **Symphony Direct & 3rd Party Management**
	• **Symphony Direct & AVI-SPL Monitoring Agent**

Monitoring Proxy	Applicable when the Monitoring Source includes a Room Controller or 3rd Party Management. This field determines whether an aggregator controls this device in a room or 3rd Party Management controls this device.
Configuration Item ID	Enter the "sys_id" of the "cmdb_ci" record found in ServiceNow. This allows for automatic mapping of the device ID to the correct device when an incident is opened in ServiceNow.
Third Party ID	The **Device IDs** found in the retrieved **.json** files from the controller.
Customer Cost Center ID	If applicable, this can be used to record and store the Cost Center details for the device.
Lease Expiration	The expiration date of the lease or service for the device. This field is monitored by the expiration date. When the restriction is violated a ticket can be generated. If the field is empty, no monitoring is performed.
Manufacturer Warranty Expiration	The expiration date of the manufacturer's device warranty for the device. This field is monitored by the expiration date. When the restriction is violated a ticket can be generated. If the field is empty, no monitoring is performed.
Management Address	Enter the IP or DNS address for the device. This field is required only when: • The Type field on the Information tab is set to Codecs and the Calling Method is set to IP Address, IP Address via SIP, or IP Address via H.323. • The Monitoring Source field on the **Information** tab includes **Symphony Direct**. • At least one **Management Interface** is configured on the **Information** tab. The value entered here is automatically populated in the **Add/Edit Device | Properties** tab > **Management Address** field and vice versa.

Field	Description
Local IP Address	If not already designated in the **Management Address** field, enter the IP address for the device. If the IP address is already entered in the **Management Address** field, leave this field blank.
Device Management URL	
Protocols	Required. At least one of the checkboxes must be selected when the **Monitoring Service** is **Manage & Monitor.** These protocols are utilized for communicating between a device and Symphony. For Crestron and AMX Controllers, select the HTTP box.
Secure	Required. The Secure Shell (SSH) protocol box is selected, by default. This field indicates whether credentials are necessary for utilizing the protocol or device. For example: • For HTTP do not select this check box. • For HTTPS select the check box • For Crestron and AMX Controllers, clear the check box.
Username & Password	Enter the username and password necessary for managing the device. For Crestron and AMX Controllers, use any valid credentials.
Local Port	The device's local port number for the device. For Crestron and AMX Controllers, enter **8080**.
Remote Port	The device's remote port number for the device. For Crestron and AMX Controllers, leave this field blank.

Add/Edit Device | Properties Tab

These fields may vary depending on the selected Device type.

Field	Description
Management Address	Enter the IP or DNS address for the device. This field is required only when: • The **Type** field on the **Information** tab is set to **Codecs** and the **Calling Method** is set to **IP Address**, **IP Address via SIP**, or IP Address via H.323. • The Monitoring Source field on the Information tab includes Symphony Direct. • At least one **Management Interface** is configured on the **Information** tab. The value entered here is automatically populated in the **Add/Edit Device	Information** tab > **Management Address** field and vice versa.
Software Version	The software version of the device. Example: Release - 6.1.3-390050
Serial Number	The serial number found on the device.

Field	Description
	Example: 82144443143ABC
MAC Address	The MAC address of the device. If adding a Cloud Connecter (CommProxy), this field is required. Symphony uses this field to find the CommProxy to monitor.
	Example: 00:D0:AC:41:12:3D
SNMP Community	The SNMP community string. If specified, Symphony monitors SNMP OIDs configured for this device model.

Updating the Device Image

1. In the left navigation bar, select **Administration > Devices.**
   The **Devices** page is displayed.
2. Select a device name.
   The **Edit Device** page is displayed.
3. On the **Information** tab, under the image, select **Change**.
   The **Upload Logo** window is displayed.
4. Select **Logo** and browse for the correct image file.
5. Select **Upload**.
   The **Edit Device** window is displayed and includes the new image.
6. Select **Update**.

Downloading a Device's QR Code

Each device has a unique QR code that can be downloaded, printed, and posted in a room or shared with users. Meeting attendees can scan the code to access the device details.

1. In the left navigation pane, select **Administration > Devices**.
2. Select a device.
   The **Edit Device** window is displayed.
3. On the **Information** tab, double-click the device image.
   A QR code is displayed.
4. Select **Download**.
   The QR code is downloaded as a .png file.

Configuring Device Monitoring Triggers

A device's default monitoring triggers, set at the Global, Account, Location, or Room level, can be modified or added to meet the needs of a specific device**.** However, they cannot be deleted at the device level. All triggers must be deleted at the Global configuration level.

1. In the left navigation bar, select **Administration > Devices.**
   The **Devices** page is displayed.

2. At the end of the Device row that needs to be updated, select ⋮ and select **Configure Device**.
   The **Edit Device** page is displayed.

3. Select the **Triggers** tab.

4. Do one of the following

If…	Then…
Adding a new trigger,	1. In the upper-right toolbar, select ➕. The **Add Trigger** window is displayed. For more information on the fields available on this window, see Add/Edit Trigger Window. 2. Select the **Alarm ON** and **Alarm OFF** check boxes to enable all fields.
Editing an existing trigger,	In the **Trigger Name** column, select a trigger. The **Edit Trigger** window is displayed. For more information on the fields available on this window, see Add/Edit Trigger Window. If that trigger is inherited, it cannot be edited unless the inheritance is broken. At the top of the window, next to the 🔗 icon, click the link to break the inheritance.

5. Complete each field to indicate the requirements that will trigger an alert.

6. Select **OK**.

Restricting Device Monitoring Schedules

A monitoring schedule can be set for all devices with pre-defined inherited settings, or the settings can be customized for specific devices.

1. In the left navigation bar, select **Administration > Devices.**
   The **Devices** page is displayed.

2. At the end of the device row that needs to be updated, select ⋮ and select **Configure Device**.
   The **Edit Device** page is displayed.

3. On the **Monitoring Restrictions** tab, select the 🔗 icon to break the inheritance.
   The icon changes to ⊗.

4. Specify the days and hours that the Device should be monitored.

5. Select **Update**

Pause Ticket Generation for Devices

The settings for monitoring devices that result in generating tickets are inherited from the Global, Account, Location, and Room levels. However, this can be changed to temporarily stop generating tickets for a device. Monitoring of the device will continue but tickets are not generated when the triggers are met.

This is most helpful if work is being performed on a specific device that will result in many tickets to be generated.

1. In the left navigation bar, select **Administration > Devices.**
    The **Devices** page is displayed.
2. At the end of the device row that needs to be updated, select ⋮ and select **Configure Device**.
    The **Edit Device** page is displayed.
3. Select the **Monitoring Restrictions** tab.
4. Next to the **Block Monitoring Triggers** check box, select the 🔗 icon to break the inheritance.
    The icon changes to ⊗.
5. Select the **Block Monitoring Triggers** check box.
6. Select **Update**.

> **TIP** To resume ticket generation when a monitoring trigger is reached, clear the **Block Monitoring Triggers** check box and select the ⊗ icon to resume inheritance. The icon changes to 🔗.

Monitoring Device Expiration Dates

1. In the left navigation bar, select **Administration > Devices.**
    The **Devices** page is displayed.
2. At the end of the Device row that needs to be updated, select ⋮ and select **Configure Device**.
    The **Edit Device** page is displayed.
3. On the **Service Contracts & Warranty** tab, next to an option, select the 🔗 icon to break the inheritance.
    The icon changes to ⊗.
4. Enter the number of days, for each uninherited expiration date, that will generate an alert, if reached.
5. Select **Update**.

Deleting Devices

When a device is deleted, any **Open** and **Pending Close** tickets associated with the device are automatically closed.

1. In the left navigation pane, select **Administration > Devices**.
2. Select the check box next to the device that should be deleted.

> **TIP**   To delete all devices, select the top checkbox in the column.

3. On the top-right toolbar, select   .
   A **Warning** is displayed confirming the selected device should be deleted.
4. Select **OK**.

Batch Importing Devices

Devices can be batch imported by uploading an .xls or .csv file containing records for multiple devices. The file must only contain device records. For example, the list cannot contain records for both devices and rooms.

If a record for a specific device already exists, the fields are updated with the imported information; a new record is not created. Only fields present in the file are updated; existing fields are not changed if they are not included the file. If a field has no value in the imported file, the record is updated to remove that field.

1. In the left navigation pane, select **Administration > Devices**.
2. Select the icon.
   The **Import Devices** window is displayed.
3. Select the .csv or .xls file containing the records that should be imported.
4. Select **Upload**.

Viewing a Device's Audit Trail

1. In the left navigation pane, select **Administration > Devices**.
   The **Devices** list is displayed.
2. Select a device.
3. On the **Edit Device** page, select the **Audit Trails** tab.
   All changes made to the selected device are displayed.

> **TIP**   On the toolbar,
>
> - Select to export the list to a csv file.

- Select ⟳ to refresh the list and display real-time data.
- Select ☐ to modify the columns displayed on the tab.
- Select ⏷ to filter the displayed data.

Batch Updating Properties

When administering Users, Locations, Rooms, and Devices, the properties of all items in that category can be changed in bulk rather than updating the properties of every User, Location, Room, or Device individually.

When performing bulk updates, the user has the flexibility to select only the specific properties that require bulk updating.

1. In the left navigation bar, select **Administration** and select the category that should be updated:
    - Locations
    - Rooms
    - Devices
2. Select the first check box at the top of the check box column.

    All check boxes are selected.

3. Select ▥ .

    The **Bulk Change** *category* window is displayed confirming that all selected items will be updated at the same time.

4. Select **Change**.
5. The **Bulk Change** *category* page is displayed.
6. Select the check boxes next to each property that should be updated.

    Each selected field is displayed in an editable format.

7. Update each field.
8. Select **Update**.

    A confirmation is displayed with the total number of fields and items that will be updated.

9. Select **OK**.

Chapter 11

Analytics

Symphony provides interactive Analytic Dashboards. The dashboards provide robust customizable reporting options to users in real-time to display key performance indicators and key data points for monitoring Symphony.

Available dashboards include:
- Savings
- Meetings
- Meetings Performance
- Meetings Quality
- Room General
- Room Details
- Tickets
- Issues

NOTE When a dashboard is closed and then reopened, the default view of the dashboard is restored; changes are not saved.

Savings Dashboard

This dashboard analyzes the savings gained from utilizing Symphony Video Conference Meetings instead of traveling for all meetings held over a specific period. This dashboard includes data for the:
- Total Distance, carbon, and money saved.
- Graphical charts showing the distance, carbon, and money saved by day.
- A map view of all meeting room locations.

The dashboard measurements can be updated to reflect the unit of measure for the current location. Carbon savings can be measured in kilograms (kgs) or pounds (lbs.). The Distance measurements can be set to kilometers (km) or miles (mi). These measurements are specified in the account Preferences. For more information, see Setting Account Preferences.

Meetings Dashboard

The Meetings dashboard analyzes meetings managed by Symphony during a specified period

The following bar charts are displayed:

Graph	Description
By Meeting Instance Type	This chart displays the number of each meeting type held over the specified period, such as Multipoint or AdHoc meetings.
By Start Date	This chart displays the number of meetings held on each date in the specified time period.
By Device Manufacturer	This chart displays the number of meetings held, broken down by device manufacturer, during the specified time period.
By Room Name	This chart displays the number of meetings held in each managed room during the specified time period.
By Second Metric	A secondary metric can be selected to show a comparison chart, by day, for the selected metrics. For example, a side-by-side comparison chart can compare the average number of participants in the total number of meetings held during the specified period to the same metric during the same period the year before.

By Start Day	This chart displays data for the selected Metric by day for the entire specified time frame. For example, if the graphs are displaying the number of meetings held in the last two months, this chart displays the combined total number of meetings held on each Sunday, Monday, Tuesday, and so on, during the last two months.

Meetings Performance Dashboard

This dashboard displays graphs and informational cards that measure the performance aspects of meetings held during the specified time period.

The customizable bar graphs include:
- **Metric per meeting Properties**
- **Metric per Location Properties**
- **Metric per Device Properties**

- **Metric By Date**
- **Metric By Day**

The data displayed on each of these graphics can be changed by selecting a different Group or Metric Attribute. For more information, see [Updating Chart Graphs](#).

The Information cards displayed on this dashboard include:
- **Meetings**
- **VIP Meetings/VIP Meetings Ratio**
- **Recorded Meetings/Recorded Meetings Ratio**
- **Failed Meetings/Failed Meetings Ratio**
- **Video Meetings/Video Meetings Ratio**
- **Executed Meetings/Executed Meetings Ratio**
- **No Show Rooms/No Show Rooms Ratio**
- **External Rooms/External Rooms Ratio**

These cards show the total number of meetings or rooms that apply to the card category and a comparison between two selected metrics for that category.

Meetings Quality Dashboard

This dashboard displays customizable graphs that display bar graphs showing the following metrics:
- **Metric per Meeting Properties**
- **Metrics By Date**
- **Metric per Location Properties**
- **Metric per Device Properties**
- **Metric by Date Vs Secondary Metric**
- **Metric By Day**

The data displayed on each of these graphics can be changed by selecting a different Group or Metric Attribute. For more information, see [Updating Chart Graphs](#).

The following Informational cards that analyze the following categories, for meetings held during the specified time period, are displayed:
- **Call Rate Average**
- **Jitter Average**
- **Packets Loss**
- **Video Speed Average**
- **Tickets Opened**

These cards show the total average for the category and a comparison between two selected metrics for that category.

For example, the **Call Rate Average** card shows the total value for a selected metric during the selected time period and the percentage difference between that average and the average for the selected comparison metric.
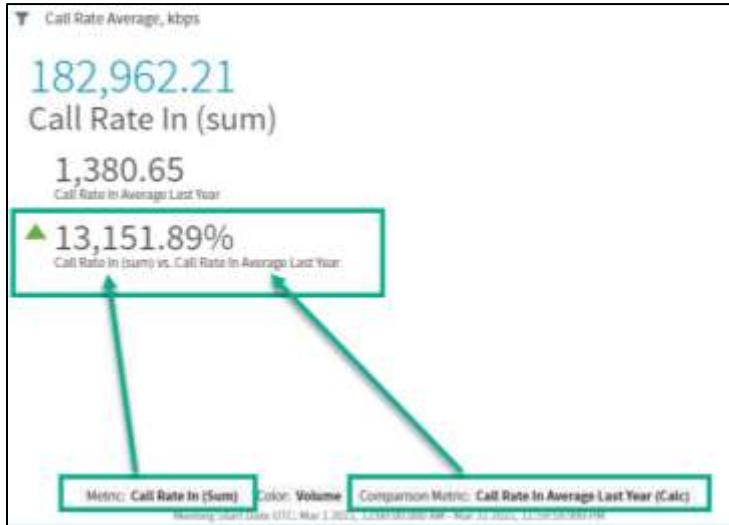
Room General Dashboard

This dashboard includes informational cards that shows the total number for the following:

- **Total Number of Rooms**
- **Rooms in Service**
- **Managed Rooms**
- **VIP Rooms**

The following data is available on this dashboard and based on the metrics selected, the dashboard is updated to include a visual representation of that data:

Graph	Description
Rooms Location	This map shows the location and room count for all rooms that are managed by Symphony.
Number of Meetings by Room	Displayed a bar graph of the total number of meetings managed by Symphony in each room for the selected time period.
Room Coverage	Displays a bar graph containing the total number of devices with expiring leases, warranties, and service plans.
Video Conference Equipment in Rooms	Displays a pie chart showing the percentages and total number of rooms with and without video conferencing equipment.
AV Controllers in Rooms	Displays a pie chart showing the percentages and total number of rooms with and without controllers.

The data displayed on each of these graphics can be changed by selecting a different Group or Metric Attribute. For more information, see [Updating Chart Graphs](#).

Room Details Dashboard

This dashboard displays customizable graphs that display bar graphs showing the following metrics:

Graph	Description
Room Downtime % by Date	Displays a line chart with the percentage of room downtime by date.
Room Downtime % by Room Name	Displays a bar graph of the percentage of room downtime experienced by room name.
Number of Meetings by Room	Displayed a bar graph of the total number of meetings managed by Symphony in each room for the selected time period.
Device Count by Device Model	Displays the total number of each type of device model.
Issues Count by Device Model	A bar graph displays the total number of open issues by device model.

The data displayed on each of these graphics can be changed by selecting a different Group or Metric Attribute. For more information, see [Updating Chart Graphs](#).

The Information cards displayed on this dashboard include:

Graph	Description
Total Number of Devices	Displays the total number of active devices, based on the selected Metric.
Devices with Opened Issues	Displays the total number of devices with open issues or the total number of issues, based on the selected Metric.
Active Devices	Displays the total number of active devices or rooms with active devices, based on the selected Metric.
Opened Issues	Displays the total number of open issues or devices with open issues, based on the selected Metric.

The **Room Details** table displays the following for all rooms managed by Symphony:
- **Account Name**
- **City**
- **Country**
- **Device IP Address**
- **Device Lease Expiration**
- **Device Manufacturer**
- **Device Model**

- **Device Warranty**
- **Location**
- **Managed**
- **Room**
- **Room Service Expiration Date**
- **State**

Tickets Analytics Dashboard

This dashboard displays customizable graphs that display bar graphs showing the following metrics for analyzing tickets:

Graph	Description
Tickets	Displays the number of tickets based on the selected attribute. Attributes include, but are not limited to, Ticket Priority, Closed By, Ticket Duration Interval, Room Name, Location City, Device Manufacturer, and Device Model.
Open, Closed Tickets by Date	Displays the number of open and closed tickets in a different color by day.
Running Tickets by Date	Displays the number of open tickets for each day during the selected time period.
Open Tickets Dynamics by Priority (Critical, Informational, Major, and Minor)	Displays the percentage of each ticket priority in a different color by day.

The data displayed on each of these graphics can be changed by selecting a different Group or Metric Attribute. For more information, see [Updating Chart Graphs](#).

A total number for each of the following metrics, within the specified time frame, are displayed on informational Cards:

- **Average Ticket Duration**
- **Median Ticket Duration**
- **Ticket Count**
- **Open Tickets**
- **Total Ticket Events**
- **Average Events per Ticket**

Issues Analytics Dashboard

This dashboard displays issues encountered during the specified time period. An issue is associated with tickets and specifies the type of problem encountered to cause the ticket creation, such as auto launch failed or communication issues.

The Information cards displayed on this dashboard include:

- **Issues Count**
- **Total Ticket Events**
- **Average Ticket Duration**

The customizable bar graphs include:

Graph	Description
Issue Count by Device Manufacturer	Displays the total number of issues encountered by device manufacturer.
Issue Count by Issue Resolution	Displays the total number of resolved issues based on the issue resolution type.
Issue Count by Ticket Events Count	Displays the percentage of tickets by how they were opened. For example, 98% of all tickets might have been raised automatically while 2% were raised another way.
Issue Count by Issue Class	Displays the percentage of each type of issue raised. For example, Communication issues might represent 30% of all issues encountered and Network issues might represent 27%.
Issue Count, Meeting Count by Date	Displays the number of issues encountered for each day during the selected time period.
Issue Count by Ticket Priority	Displays a color-coded breakdown of each day's issues encountered by ticket priority.
Issue Count by Sub-Type	Displays a color-coded breakdown of issues encountered by sub-type, such as Ping Latency or Memory Usage.

The data displayed on each of these graphics can be changed by selecting a different Group or Metric Attribute. For more information, see [Updating Chart Graphs](#).

Applying/Removing Data Filters

Each chart, card, and graph has its own filter criteria to narrow down the scope of the data displayed. The default filter criteria includes all data for the selected period. Multiple filters can be applied.

To add a filter:

1. Open any Analytics dashboard.
2. In the upper-left corner of any card, chart, or graph select the ▼ icon.
3. Select Add Filter.
   Available filter attributes are displayed.
4. Select an attribute and set the required values for that attribute.
5. Select **Apply**.
   The **Row Level Filters** display all applied filters.
6. To add additional filters, repeat steps 3 - 5.

The card, chart, or graph is updated to display data that meets the filtered criteria.

> **TIP** If a card, chart, or graph has a filter applied, the ▼ icon displays the number of applied filters next to it. For example, ▼² indicates there are two filters applied.

To remove a filter:

1. Open any Analytics dashboard.

2. In the upper-left corner of any card, chart, or graph select the ▼² icon.

> **TIP** The number displayed on the ▼ icon varies based on the number of filters applied.

3. In the **Row Level Filters** section, next to a filter, select ⊖ .
   The card, chart, or graph is updated to include data that was previously filtered out of the display.

Removing Data from Dashboards

Cards and graphs can be removed from view on any dashboard. However, the change is not permanent. The next time the page is accessed, the card is visible again and included on the dashboard.

1. Next to any card or chart graph heading, select •••.
2. Select Remove Visual.
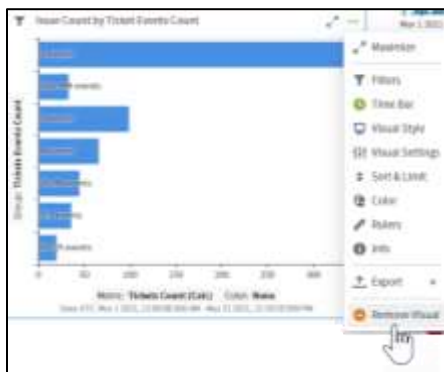
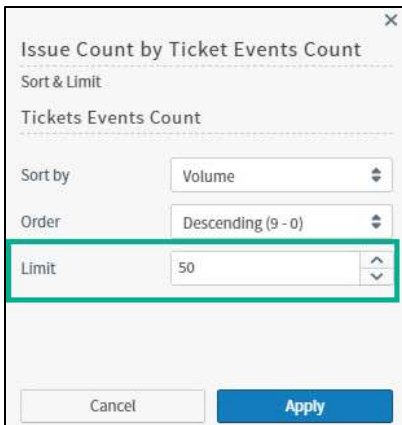The data is removed from the dashboard.

Working with Bar Chart Graphs

Limiting Graphical Display Results

Bar and line graphs can be updated to limit the number of rooms shown.

1. Next to any card or chart graph heading, select ••• .
2. Select Sort & Limit.

3. Specify the **Limit** that should be shown.

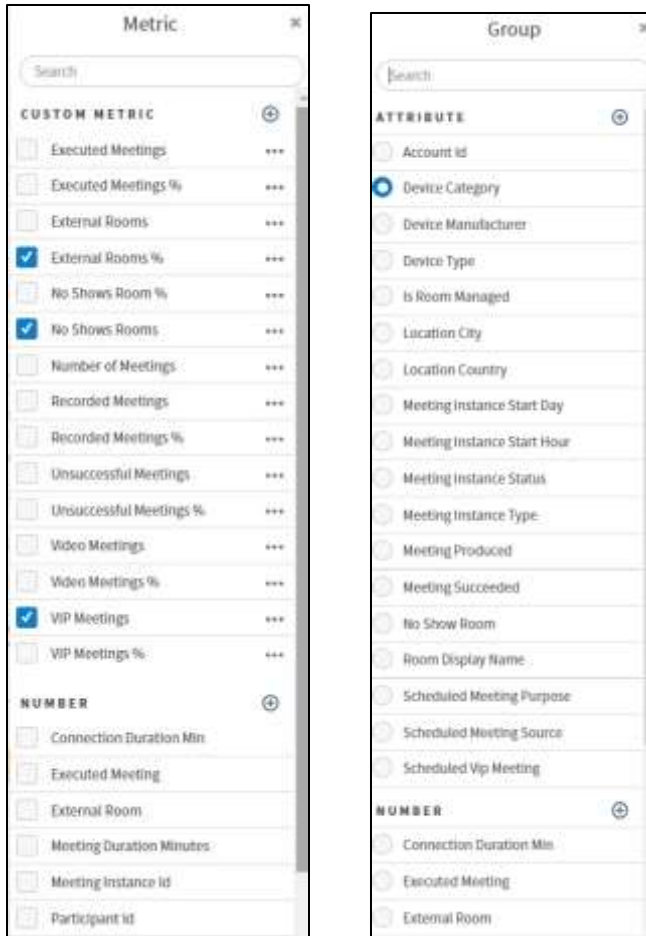4. Select **Apply**.

Updating Chart Graphs

To update the graphs with a different metric analysis:

1. On the left side of any Chart graph, select **Group** or **Metric**.

The available Groups or Metrics are displayed in a list.

2. Select one or more metric, attribute, number, or time frame.

> **TIP** Metric and Group options vary based on the dashboard and chart being graphed.

3. Select ✖ to close the list.

All displayed bar graphs are updated with data relevant to the selected metrics.

Filtering Dashboard Data by Date

Dashboards can be filtered to only display data applicable to a specific time period. The default display is the previous month.

1. Open any Analytics dashboard.
2. Scroll to the bottom of the dashboard page to view the Time Bar.

3. Adjust the Time Bar settings to select a date range:

To display data for…	Then…
The entire time period available within the Symphony database,	Select the ↔ icon. The Time Bar is updated to select all available time.
A specific time frame,	Select and drag the beginning and end points to include the correct time frame. OR Select the beginning or end date on the Time Bar and select a date from the calendar.
A pre-set time frame,	1. Select the 🗓 icon. 2. Select **Presets**. 3. Select a pre-set time frame, such as **Current Year**, **Today**, or **Rolling 90 days**. 4. Select **Apply**.
A time period based on a dynamic formula,	1. Select the 🗓 icon. 2. In the **From** and **To** fields, select **Dynamic Time**. 3. In the **From** and **To** fields, enter the conditions that determine the time frame and select **Apply**. 4. Select **Apply**.

The dashboard is updated, as applicable, to display data that is associated with the filtered time frame.

Viewing Dashboards in Fullscreen Mode

Each dashboard contains the option to make the display full screen without showing other aspects of Symphony other than the Charts and Cards.

1. On the bottom of any dashboard, select **Fullscreen Mode**.
   A **Warning** is displayed confirming the change to full screen.
2. Select **OK**.
   The dashboard is displayed in full screen.

> **TIP** To exit the full-screen display, press **Esc**.

Exporting Graphs and Cards

The individual graphs, charts, and cards on each dashboard can be downloaded as an image, PDF file, or CSV file.

1. On the top-right of a graph, chart, and card, select ⋯ .
2. Select **Export** and select a file format.
   The file is downloaded, or prompts are displayed to format and save the file.

Exporting Dashboards

The entire dashboard can be exported to a PDF or image file (.png).

1. On the top of any dashboard, select the ⬆ icon.
2. Select an **Export** option:
   - Screenshot (PNG)
   - PDF
3. Do one of the following, based on the export option selection:

If exporting to a…	Then…
Screenshot	A screenshot is displayed. Click the image to download the PNG file.
PDF	1. In the Export as PDF window, add a **Header** and **Footer**. 2. To add a timestamp to the file, select the **Add Timestamp** check box. 3. Select **Export**.

Chapter 12

Reports

Symphony provides the ability to create commonly requested reports with predefined criteria or reports that are fully customizable to the needs of the organization.

All time fields on the reports are based on Universal Time Coordinated (UTC).

Predefined Reports

Predefined reports are available in Symphony for the most requested data. The reports can be sorted, filtered to include specific date ranges, and exported to other file formats.

Viewing Predefined Reports

To view a predefined report:

- In the left navigation pane, select **Reports** and select a report. The available reports include:

Report	Description
Accounts	Includes a total number of the following for each account: • Devices • Rooms • Locations • Scheduled Meetings • Ad Hoc Meetings • Point to Point Meetings • Recorded Storage (MB) • Tickets Created
Users	Includes details about each user profile registered in an account.
Tickets	Includes specific details for every ticket opened within an account, such as • Ticket ID • Ticket Priority • Ticket Subject • Problem Description • All Meeting IDs affected by the problem
Billing	Includes information helpful for billing and auditing of all meetings associated with an account. The following information is included in this report for each meeting: • Meeting ID • Meeting Start Date UTC • Meeting End Date UTC

Report	Description
	• Meeting Title • Billing Code • Description • QuantityAVG
Sweeps	Includes details for every Room sweep meeting held for each account. The Room sweep details include: • Meeting ID • Start Date and Time • End Date and Time • Meeting Title • Room name • Device details • Location
Meetings	Includes complete meeting details for every meeting held for each account.
Room Utilization	Includes meeting details for each room grouped by account. The room details include: • Location • Total number of meetings, video meetings, and successful video meetings held in that room • Total amount of time, in minutes, the room was available and utilized • The utilization ratio for meetings and video meetings
CDR	Call Detail Record. A report taken from Codecs and Bridges which provides details regarding all conferences with which the record was involved.
Audit Trails	A report of all changes made within Symphony, including who made the changes and the date and time the changes were made. The Audit log list can be filtered to display or hide specific types, such as Users, Locations, and Devices or actions performed, such as deletions, creations, and logins. For more information, see Filtering Audit Logs. Audit logs are also available in the Administration module when configuring the following: • Global Configuration • Accounts • Users • Locations • Rooms • Devices For more information, see the linked topics above for each item.

All report data is displayed in a table format and contains static data, except for the ability to modify the time frame included.

> **TIP**
> - To sort the display on a specific field, select a column header.
> - To display the report in full screen, select **Fullscreen Mode**.

Exporting Pre-defined Reports

1. Open a report.

2. On the top-right toolbar, select ⋮ .

3. Select **Export**

4. Select an export option.

   Export options vary based on the report.

Report	Export Formats
Accounts	• Image • CSV File • PDF File
Users	• Image • CSV File • PDF File
Tickets	• Image • CSV File • PDF File
Billing	• Image • CSV File • PDF File
Sweeps	• Image • CSV File • PDF File
Meetings	• Image • CSV File • PDF File
Room Utilization	• Image • CSV File • PDF File
CDR	• Image • CSV File • PDF File
Audit Trails	CSV File

5. Do one of the following, based on the export option selection:

If exporting to a…	Then…
Screenshot	A PNG file is downloaded.
Visual Data CSV	A CSV file is downloaded.

If exporting to a…	Then…
Raw Data CSV	1. Specify the **Number of Records** to include. 2. Select a **Sort by** option. 3. Select **Export**.
PDF	1. In the **Export as PDF** window, add a **Header** and **Footer**. 2. To add a timestamp to the file, select the **Add Timestamp** check box. 3. Select **Export**.

Filtering Audit Logs

Audit logs can be filtered to show multiple actions taken on the various type of data within Symphony. This allows the user to show or hide only specific audit records of specific types, such as Users, Devices, or Tickets and specific actions taken on those types, such as deletions, logins, and creations.

For example, all logins on a specific device or location can be displayed.

1. In the left navigation pane, select **Reports** and select **Audit Trails**.
2. In the upper-right toolbar, select the ▼ icon.
   The **Filter** window is displayed.
3. In the **List Records** list, select the time period to apply to the data shown in the list.
4. In the **Include type** field, select the types of data that are to be included in the list. This data type is indicated for each record in the **Entity Type** column. Options include:

Display Icon	Hide Icon	Entity Type
🛡	🛡	System
🌐	🌐	Account
👤	👤	User
🏢	🏢	Location
▦	▦	Room
🖥	🖥	Device
📶	📶	Catalog
🔌	🔌	Property

5. In the include action field, select the activities that are to be included in the list. This data type is indicated for each record in the **Action** column. Options include:

Display Icon	Hide Icon	Action Type
⊞	⊞	Created
🗑	🗑	Deleted
✎	✎	Modified

Display Icon	Hide Icon	Action Type
→	→	Login
⚷	⚷	Protected
▪▪	▪▪	Workflow

Custom Reports

Building Custom Reports

Users can build custom dashboards that include specific data which can be saved and reused. These dashboards can include the same data included in the predefined reports but combines them into one comprehensive dashboard.

A customized dashboard can be created for specific audiences which includes the necessary data specific to that group's business needs. For example, the data needed by the IT department could be different than the information needed by the Finance department.

Custom reports can be created using a blank template that contains no suggested data or some predefined templates that include data pertinent to that category, such as meetings, tickets, and devices.

1. In the left navigation pane, select **Reports > Build Your Own**.
2. On the top right, select the ✛ icon.
   The **New Report** window is displayed.
3. In the **Name** field, enter a unique name for this report.
4. Enter a **Description** of the report to easily identify what is included in this report.
5. Select **OK**.
   The *report name* page is displayed.
6. In the toolbar select **Add Visual**.
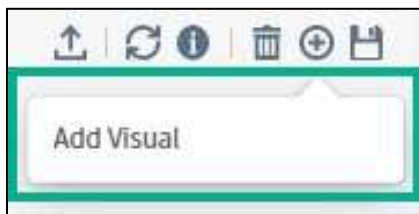
7. On the **Step 1 of 2: Select a Source** window, specify the connection type and select a report template.
8. On the **Step 2 of 2: Select Visual Type** window, specify the type of report being created, such as a Bar graph or Pie chart.
   The selected report is displayed on the dashboard.

9. Select the icon and select **Save**.
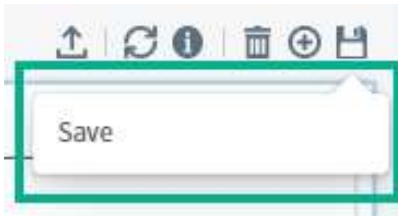
10. In the **Save Options** window, specify a **Name** and **Description** for the report or leave the existing field values and select **Save**.

Viewing Custom Reports

1. In the left navigation pane, select **Reports > Build Your Own**.

   The **Reports** page is displayed with a list of all reports previously created.

2. Select a report name.

   The report is displayed.

Exporting Custom Reports

1. Open or build a custom report.

2. On the top-right toolbar, select the icon.

3. Select an **Export** option:
   - Screenshot (PNG)
   - PDF

4. Do one of the following, based on the export option selection:

If exporting to a…	Then…
Screenshot	A screenshot is displayed.
	Click the image to download the PNG file.
PDF	1. In the Export as PDF window, add a **Header** and **Footer**.
	2. To add a timestamp to the file, select the **Add Timestamp** check box.
	3. Select **Export**.

Deleting Custom Reports

1. Open or build a custom report.

   On the top-right toolbar, select the icon.

   A confirmation is displayed confirming the deletion.

2. Select **Delete**.

   The report is deleted and removed from the dashboard.

Filtering Reports

Reports can be filtered to show a subset of the report data.

Predefined reports have limited filtering options as the data displayed in the report is static and cannot be removed or added. When a filter is set, it is saved as the default filter for that report. To change the default, the filter must be updated with a different period.

To add a filter to a report:

1. Next to the report heading, select the ▽ icon.
   The **Dashboard Filters** pane is displayed.
2. Select an **Attribute** or **Number** and set the criteria.
3. Select **Apply**.
   The report is updated to display data that meets the filtered criteria.

To remove the filter from a report:

1. Next to the report heading, select the ⧩② icon.

   > **TIP**   The number displayed on the ▽ icon varies based on the number of filters applied.

2. In the **Row Level Filters** section, next to a filter, select ⊖ .
   The report is updated to include data that was previously filtered out of the display.

Chapter 13

Scheduling Meetings

Based on permissions, the **Schedule Meeting** button is on the bottom of the left navigation pane. This provides scheduling options for conducting Symphony-managed meetings.

To schedule a meeting:

1. Select Schedule Meeting.
2. Complete all fields, as necessary, on each available tab:
   - **Appointment**
   - **Conferencing**
   - **Advanced**
   - **Producer**
3. Select **Send**.

Appointment Tab

This tab contains the scheduling details for the meeting:

Field	Description
Account	Available for users who have access to all accounts rather than Home Account only. Select the account the meeting should be associated with.
Participants	The meeting attendees who should receive an invitation to the meeting. To select participants: 1. Select the 📘 icon. 2. Next to each name, select ➕. The selected participants are added to the **Selected Participants** section. 3. Select **OK**. **TIP** To remove a participant, in the **Selected Participants** section, select ➖.
Subject	Required. Enter the topic of the meeting.
Starts	Required. Select the date and time the meeting starts.
Ends	Required. Select the date and time the meeting ends.
Setup time (mins)	Enter the number of minutes the call should be connected before the meeting begins, if applicable. This allows for troubleshooting and testing within the call to avoid delay in beginning the meeting with no issues.

Field	Description
	If a Producer is assigned to the call, the Producer completes the troubleshooting and if any issues are encountered, they work with local Administrators to attempt resolution before the call begins.
Time	Select the time zone the meeting should be created in if other than the indicated default time zone. The default time zone is based on the preferences set in the user's Symphony profile. For more information, see [Setting Account Preferences](#).
Description	Enter a detailed description of the meeting.

Conferencing Tab

When selecting rooms in the web scheduler **Conferencing** tab, select a room and ensure the **Automatically connect devices to the meeting** check box is selected.

Field	Description
Starts	Required. Displays the date and time the meeting starts. This can be changed to select a new date and time.
Ends	Required. Displays the date and time the meeting ends. This can be changed to select a new date and time.
Participants can join by phone	Select this check box to allow meeting attendees to join the meeting by phone. Clear this check box to require meeting attendees to join the meeting from a specific room. **NOTE** Not all Symphony accounts have audio lines built into the account, which is required for this feature.
Participants can join from a web browser or smartphone	Select this check box to allow meeting attendees to join the meeting from a web browser or smartphone. Clear this check box to require meeting attendees to join the meeting from a specific room.
Record Meeting	Select this check box to record the meeting. By default, the meeting owner will become the recording owner and receive the recording link following completion of the call. **NOTE** Not all Symphony accounts have recording functionality.
Rooms	Displays the rooms selected for the meeting. To select rooms: 1. Select **Add Room**. The **Add Room** window is displayed and contains the following tabs: • Directory • Favorites • Recent

Field	Description

- Other
2. Do one of the following:
- On the **Directory** tab, select a location name and select ➕ to select that room.

> **TIP** Select the ♡ next to any room name to add it to the **Favorites** tab. Favorites can be used to select rooms that are most frequently used.

- On the **Favorites** tab, select ➕ to select a room previously designated as a favorite.
- On the **Recent** tab, select ➕ to select a recently used room.
- On the **Other** tab, manually enter the details for an unmanaged endpoint device.
  The selected rooms and devices are added to the **Selected Rooms** section.

> **TIP** If a selected room was added via the **Other** tab, that room can be modified, and the change is applied to that room for the current meeting only.
>
> If the room was a favorite, the modified room is not automatically saved as a favorite and does not override the current favorite room. If both the original and edited room should be saved as favorites, then the edited room must be added to the **Favorites** list.
>
> To edit a selected room previously added via the **Other** tab:
>
> 1. In the **Selected Rooms** section, select the link for the specific room.
>
>
>
> 2. On the **Custom Room** window, edit the room details.

Field	Description

3. Click **OK**.
The modified room replaces the original room in the meeting only. It is not a Favorite and does not replace the previously designated Favorite room.

The originally selected Favorite is removed from the **Selected Rooms** section and is visible on the **Favorites** tab.
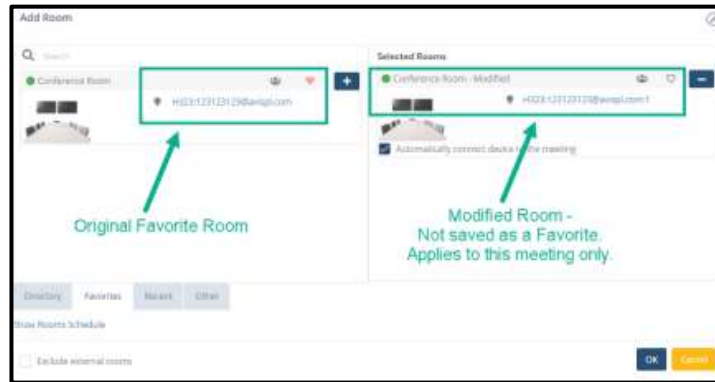
3. To review the selected rooms' calendar, select **Show Rooms Schedule**. The schedule is displayed for all the selected rooms and devices.

TIP
- A blue box indicates the meeting timeframe. If nothing is displayed inside the blue box, then the room or device is available.
- A timeframe that is shaded blue indicates the room or device is not available. Hover over the box to display the meeting details already scheduled for the selected room and timeframe.
- A brown box indicates the setup time for the meeting, if applicable.
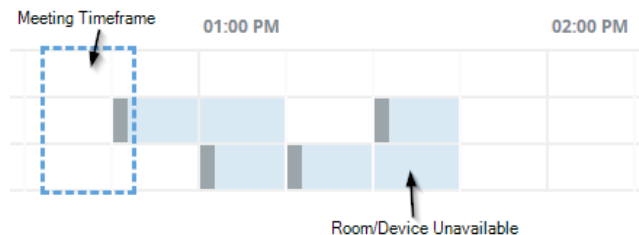
4. Select **OK**

Advanced Tab

Field	Description
Provider	Select the service used to launch the meeting.
	Options available in this field are based on the configured External Video Cloud Services (EVCSs). The Display name for the EVCS is displayed. If a Display name was not specified when configuring the EVCS, then the EVCS Type is displayed.
Meeting ID	Enter the meeting ID provided by the selected EVCS.
Host MCU	Select the video bridge used for the call. Options vary by organization.
Meeting Setup	Select an option to determine if the meeting start up should be:
	• Automatic
	The meeting is automatically started by Symphony at the scheduled time.
	• Manual
	The Producer or meeting Owner must start the call.
MCU Portal	Only available when a Distributed Media Application (DMA) account is selected in the **Appointment** tab | **Account** field and a DMA Multipoint Control Unit (MCU) device is used. Select the correct portal to use when monitoring live meetings.
Conference Template	Only available when a Distributed Media Application (DMA) account is selected in the **Appointment** tab | **Account** field and a DMA Multipoint Control Unit (MCU) device is used. Select the correct template to be used for the meeting.
Send email invitation to all participants	A meeting can be scheduled to send an invitation via email to each invited participant or it can be scheduled without notifying participants.
	Select this check box to send an invitation via email to all participants invited to the meeting.
Reserve additional ports	Select this check box to allow for additional bridge ports to be available for the meeting. This is usually used for large meetings with multiple locations or attendees dialing into the meeting. If selected, specify the number of additional ports that should be reserved.
Request Producer Attendance	Select this check box and an attendance option to request that a Producer attend the entire meeting, attend the meeting to greet attendees, or to monitor the connections.
Preferred Conference Layout	Select **Framing Tool** to select the video layout for the meeting based on the number of attendees. In the **Layout Geometry** section, select the number of attendees and a corresponding layout for that number. The larger video frame can be set to show the main speaker while other participants are minimized to the side or bottom of the video display or in a meeting with four participants, all participants can be shown in identical size frames.
	In the **Layout Pinning** section, select what should be shown on each section of the video, by default. This option is not available for DMA MCU devices.
Advanced Audio-Conferencing Options	Available when the **Participants can join by phone** option is selected on the **Conferencing** tab. The available options vary.
	Enter details for the audio lines to be added into the meeting.

Field	Description
	If a shared audio conferencing service is selected, the **Host MCU** and **Audio Conference** fields are set to a value of **Automatic**. Symphony selects the best service from the shared pool. • Service Name This includes all the shared audio services configured for the account. • Audio Conference This field contains a value of **Automatic** or **Manual**. If this field is set to **Automatic**, the following fields are hidden: • Attendee Access Code • Attendee Access PIN • Host Access Code • Host PIN If this field is set to Manual and the account has the personal audio-conferencing service available, these fields are displayed. This information is pulled from the user's profile (Conferencing tab) and must be changed at the User profile level. Symphony selects and reserves one of the shared audio conferences automatically.

Producer Tab

The **Producer** tab is available to users with the **can produce meetings** permission; it includes options related to the meeting request for audio and video conferencing.

Field	Description
Source	Select one of the following: • Phone • Email • Symphony • Other
Owner	Displays the main point of contact for the meeting and can only be changed when scheduling or editing the meeting; the owner cannot be changed after the meeting starts. To change the Owner: 1. Select the ▤ icon. 2. Select the Owner's name and email address. 3. Select **OK**. If the meeting is recorded, the Owner has access to the stored recording and can share it with others.
Requester	By default, this field contains the meeting Owner's name and address. To change the requester: 1. Select the ▤ icon. 2. Select the Requester's name and email address.

Field	Description
	3. Select **OK**.
Purpose	Select the meeting purpose: • **Regular Meeting** • **Maintenance** • **Certification of Managed** • **Certification of Unmanaged** • **Room Sweep** • **Other**
Meeting V.I.P.	Select this check box to designate a meeting as a V.I.P. This flags the meeting as having a potential change in service. If any of the participants, owners, requestors, rooms, or devices are tagged as V.I.Ps., the check box is selected by default and the meeting is designated a V.I.P. meeting.
Preferred Producer	Available for users with the **can assign producers to meetings** permission. Select a Producer to request that Producer. After the meeting invitations are sent, the assigned Producer can be changed or removed on the **Dashboard Meeting Maestro** > meeting details page. See Assigning a Producer to a Meeting.

Chapter 14

Producing Meetings

Producers are responsible for joining meetings, when requested and assigned, to

- Perform pre-meeting checks during setup time.
- Join the meeting as a participant if they were requested to greet participants, attend the full meeting, or monitor the connections.
- Test endpoints.
- Monitor meeting statistics
- Ensure devices assigned to meetings are working properly and troubleshoot issues.
- [Audio Bridging at Meeting Time](#)
- [Moderating meetings](#)
- [Monitoring meetings](#)

Producers must be assigned the **can produce meetings** permission.

Types of Meetings

There are multiple meeting types, based on the purpose of the meeting, specifically used by Producers.

Meeting Purpose	Description
Regular Meeting	A meeting that includes Symphony Services, such as the various types of purchased services provided to customer accounts such as Symphony Conferencing Services, Bridging Services, and Recording Services.
Maintenance • Certification of managed • Certification of unmanaged	A certification of a managed or unmanaged endpoint is performed.
Room Sweep	A Sweep meeting is set up to test a device and ensure full functionality. The Producer conducts Sweep meetings as part of providing a proactive monitoring solution. Reports are available for Sweep Meetings.

Performing Room Sweep Meetings

This does not apply to accounts using Managed Services Powered by Symphony.

Sweep meetings can be set as recurring. Depending on the account, sweeps can be performed:

- Daily
- Weekly

- The 15th of the month
- The first Sunday of the month

Multiple time zones should be considered, when applicable. For example, a sweep should not be launched in a room during a day or time that a meeting is in progress.

Sweeps are scheduled like any other meeting and ensures only relevant endpoints are added. The duration of a sweep is a parameter configured globally or per account. The parameter cannot be set to less than three minutes. Sweeps are usually performed with a group of seven endpoints and the connection remains active for 10 minutes.

While performing a sweep, Symphony automatically does the following:

Timeframe	Actions Performed
Meeting Start Time	Connects all endpoints to the meeting.
2 mins after the meeting start time	• Starts Monitoring • Verifies all endpoints are connected to the meeting
Meeting End Time	• Disconnects all endpoints • Saves monitoring data in the sweep reports

To schedule sweep meetings:

- On the **Producer** Tab, set the **Purpose** field to **Room Sweep**.

To perform ad-hoc room sweeps:

1. In the navigation pane, select **Devices** > **Browse**.

2. Select ⋮ and select **Room Sweep**.
   The **Room Sweep for *account name*** is displayed with the results of the room sweep.

> **NOTE** If a monitoring restriction is violated during a sweep, a ticket is generated. If a similar ticket already exists, the ticket is updated.

Assigning a Producer to a Meeting

If they **can assign producer to meetings** permission is assigned, the user can assign Producers to a meeting or change the assigned Producer.

1. Open the Dashboard > Meetings Maestro section.
2. Select the **meeting ID**.
   The meeting **Information** tab is displayed.
3. Select the **Producer** field link.
4. In the Select a producer for *meeting number* list, select a name.

5. Select **OK**.

<table>
<tr><td>NOTE</td><td>After a Producer is assigned, to remove the Producer, use the Edit action to select the blank Producer entry from the list.
To change a Producer for an individual meeting occurrence, use the Meetings List View and the meeting details; single occurrences cannot be changed using the scheduler.</td></tr>
</table>

Chapter 15

Symphony Call Management Features

Symphony provides several call management features, including:
- Automatic call launching
- Automatic connection to audio bridges
- V.I.P. element tagging and routing

Meeting Audio Bridges

The way in which audio bridging connections are made at the time of the meeting varies based on the type of audio conferencing.

There are three types of audio conference bridges:
- Personal
- Shared
- Gateway

Conference Type	Description
Personal	Symphony acts as the conference owner to manage the meeting and completes the following: 1. The participant dials in to the conferencing service, using the phone number, participant code, and participant PIN provided in the meeting invitation. 2. If the participant dials in before the conference starts, the participant remains in the waiting room or is connected to other phone participants, depending on how the audio conference is set up. 3. At the time of the meeting, Symphony instructs the Multipoint Control Unit (MCU) to dial out to the conferencing service, supplying the phone number, participant code, and owner PIN. 4. The MCU dials the personal conferencing service using the information provided by Symphony.
Shared	This is like the Personal conferencing, except that the owner PIN for the meeting is provisioned from the shared pool when the meeting is scheduled. Symphony uses this PIN when connecting to the service.
Gateway	A public switched telephone network (PSTN) or Integrated Services Digital Network Gateway (ISDN) gateway is registered with the MCU for the meeting. This registration is performed at one of the following times: • For PSTN, in the Advanced Audio Conferencing Options > Advanced tab. • When scheduling the meeting and adding the ISDN endpoint as a room. • When the meeting starts, the cascading connection between the Gateway and the MCU is handled automatically by the dial plan and the Gatekeeper.

Gateway Dial-in Sequence

The participant dials in to the gateway, using the dial-in information provided in the meeting invitation.

The audio portion of the meeting is added during scheduling and initiates a connection to the bridge when the meeting begins.

Public switched telephone network (PSTN) gateways are dial-in only. The only dial-out that Symphony performs is to Integrated Services Digital Network Gateway (ISDN) gateways when the ISDN endpoint is scheduled in the meeting. Symphony automatically dials out to the endpoint at meeting time.

For ad hoc meetings,
- The gateway calls into the Multipoint Control Unit (MCU) conference, verifying that the conference exists.
- The MCU notifies Symphony of the audio connection.

Symphony Cascade

A Symphony cascade occurs when one bridge calls another bridge.

At meeting time, Symphony establishes a cascade to the personal conferencing service by dialing out exactly the string contained in the Audio Dial Out DTMF Sequence defined in the administration configuration for the audio service. That string must contain variables for Access Code and optionally Access PIN.

Automatic Call Launching

For any meeting scheduled on a supported device, Symphony automatically launches the call (at the time of the meeting minus the setup time) and invites all participants.
Symphony provides automatic call launching on:
- Poly Real-time Multitasking eXecutive (RMX) Multipoint Control Unit (MCU)
- Distributed Media Application (DMA) MCU
- Pexip MCU
- Cisco Meeting Server (CMS) MCU
- Point-to-Point (at least one of the devices must be managed)

Point-to-Point vs. Multipoint Control Unit (MCU) Calls

Symphony launches a call as a **point-to-point** (P2P) call if there are only two participants. Symphony launches a call as a **Multipoint Control Unit** (MCU) call if one or more of the following is true:
- There are more than two participants.
- The meeting is defined to be recorded.
- The meeting is defined to reserve/use additional ports, (Symphony Web Scheduler, Advanced tab).
- None of the devices are managed.

Symphony uses Session Initiation Protocol (SIP) or H.323 protocol stored in the device profile, for meetings scheduled with automatic dial out.

Once the call has started, P2P cannot be changed to MCU or vice-versa. A third participant cannot join a P2P call. When only two participants remain on an MCU call, it is NOT downgraded to a P2P.

Glossary

A

Account Administrator

The person responsible for managing a Symphony account, based on the permissions specified in the Administration roles. For example, the Account Administrator can add and delete users, activate users, and monitor locations, rooms and devices as permitted.

Ad Hoc Meeting

An unscheduled meeting automatically created by Symphony when a room or device is in use to prevent double booking.

Aggregator

A device (AV Controller) that serves multiple other devices downstream by forwarding transmissions to AVI-SPL Symphony.
When the Symphony Controller Module is loaded onto these aggregators, Symphony provides rich monitoring of the Controller in addition to any devices downstream.

C

Certifications (System & Endpoints)

Short test calls conducted to ensure devices can conduct video conferences over the requested network type, connection speed, and at expected video and audio quality levels.

Cisco CMS

Cisco Meeting Server (CMS) is a provider that integrates with Symphony. The functions provided to users of CMS enabled accounts include:

- Meeting scheduling from the web scheduler or the Symphony Outlook add-in.
- Mute, unmute, disconnect remote attendees.
- Invite participants.
- Terminate meeting.
- Start and stop recording.

D

RPRM/DMA

RealPresence Resource Manager (RPRM) / RealPresence Distributed Media Application (DMA).
RPRM/DMA allows Symphony Administrators to manage and monitor thousands of voice and video devices across distributed networks.

E

Endpoint

A type of communication network node. An example of a communication endpoint is a publish-subscribe topic or a group in group communication systems.

EVCS

External Video Cloud Service. This feature allows Symphony to schedule meetings on one public cloud service such as Zoom, WebEx, and BlueJeans. EVCS is configured at the Account level.

G

GSOC

The AVI-SPL Global Services Operations Center supports accounts with the Managed Services Powered by Symphony service by providing remote monitoring and management of the video conferencing environment, including infrastructure and endpoints, as well as any virtual services.

H

H.323 Protocol

H.323 is a recommendation from the ITU Telecommunication Standardization Sector (ITU-T) that defines the protocols to provide audio-visual communication sessions on any packet network. The H.323 standard addresses call signaling and control, multimedia transport and control, and bandwidth control for point-to-point and multipoint conferences.

It is widely implemented by voice and videoconferencing equipment manufacturers. It is used in various Internet real-time applications that are deployed worldwide for both voice and video services over IP networks.

I

ISDN Endpoint

Integrated Services Digital Network Endpoint. A completely digital telephone and telecommunications network designed to carry voice, data, images, and video. Producers have to manually dial out the ISDN endpoint to a call.

ISDN Gateway

Integrated Services Digital Network Gateway

Provides transparent communication between IP and ISDN video networks and devices. ISDN dial outs are chargeable! Proper E-Logs and Usage Billing must be entered. Supports the following:

- Content sharing over ISDN
- Encryption
- High-definition video

M

Managed Services Powered by Symphony
AVI-SPL provides remote monitoring and management of the video conferencing environment, including infrastructure and endpoints. AVI-SPL's Managed Services Powered by Symphony provides all Symphony Account provisioning, configuration, and support.

MCU
Multipoint Control Unit

P

Producer
Producers connect and monitor video meetings, conduct conference sweeps, and monitor endpoints. For Managed Services Powered by Symphony, AVI-SPL provides Producers as part of the service.

PSTN
Public Switched Telephone Network. A mesh of network lines, trunks, and switches, that connect Customer Premise Equipment (CPE) together to allow them to communicate together.

R

RMS
Remote Management Services (RMS. AVI-SPL's Device Monitoring service provides 24x7 remote digital monitoring of any IP-addressable audio visual (AV), video conferencing, or Telepresence device located on your premise.

RMX MCU
Poly Real-time Media eXecutive Multipoint Control Unit.

Room
A physical or virtual room within a Location.

S

SIP
Session Initiated Protocol.

Sweep Meeting
A Sweep meeting is a special type of Symphony meeting set up specifically to test a device to ensure full functionality. The Producer conducts sweep meetings to provide a proactive monitoring solution. Reports are available for Sweep Meetings.

Symphony as a Service (SYaaS)
Symphony as a Service. Enables users to access the Symphony cloud and benefit from the capabilities of the Symphony platform to monitor and support AV unified communications and collaboration systems.

Symphony Bridging Services
With this service a user can automatically connect to a bridge when a scheduled meeting starts. Symphony offers these types of bridging services:
- Hosted MCU Bridging Service
- Hosted Audio added to Bridging Call Service

Symphony Conferencing Services
Provides direct assistance from AVI-SPL for scheduling meetings, producing meetings, and a variety of services included at no extra charge to the customer.

Symphony Recording Services
The ability to record a meeting.

Symphony Services
The various types of purchased services provided to customer Accounts, such as Symphony Conferencing Services, Bridging Services, and Recording Services.

T

Telnet Protocol
Telnet is a protocol that allows you to connect to remote computers (hosts) over a TCP/IP network, such as the internet. Using telnet client software on a computer, a connection to a telnet server can be made.

Tickets
Symphony tickets can be created via a conference call, alert, or manually. The Ticket Adapter Library (TAL) component dictates which customer third-party support applications can be synchronized to Symphony, such as ServiceNow.

Cisco TMS
Cisco TelePresence® Management Suite. Used for older Cisco Multipoint Control Units (MCUs). Exchanges data between Symphony and the TMS by obtaining all of the meetings since the last sync (time stamp) from TMS or Symphony, converting the meetings to the other format, and sending the meeting data to Symphony or TMS. TMS has a limit of 100 occurrences to a recurrent meeting.

Triggers
Symphony generates alerts when the maximum monitoring levels are met for various settings at the Account, Location, Room, or Device level.