

Feature Guide: Zoom Integration

How to Integrate Course Manager with Zoom to Launch and Manage Your Webinar Sessions

August 2022



ONPOINT

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Introduction

In the current environment, more and more training is being conducted remotely via webinars and video conferencing rather than through traditional in-person instruction. OnPoint already supports direct integrations with Cisco *WebEx* and Adobe *Connect*, enabling Administrators and Instructors to create and manage their webinar sessions through OnPoint's *Course Manager* application. This approach has now been expanded to include direct integration with a customer's Zoom platform if desired.

With the purchase of the Zoom add-on module, Administrators and Instructors can now create, manage, instruct, and report on Zoom *Meetings* and Zoom *Webinars* from within the OPLS event framework, while users may join ongoing Zoom sessions either from email notifications or directly through their OnPoint interfaces.

This document outlines the process to configure the Zoom integration, as well as create, manage, start, and join Zoom sessions from the OPLS. All features and methods described here will function the same for Zoom.com and Zoom.gov accounts.

Applications involved

- OnPoint *Course Manager* (OPCM)
- OnPoint *Performance Manager* (OPPM)
- OnPoint *Content Viewer* (OPCV)
- OnPoint *Digital Classroom* (optional module)
- Custom Interfaces

Zoom Integration Setup

The first step to utilizing Zoom Meetings and Webinars is to activate the Zoom integration module. This step must be completed by an OnPoint team member.

Zoom API Configuration

Once the module has been activated, a new “**Edit Zoom Settings**” option becomes available below the similar options for Adobe *Connect* and Cisco *WebEx* on the customer configuration page in *Course Manager*. Clicking on this option opens the Zoom Configuration window containing configurations to establish the API link between the OnPoint system and the Zoom servers.

Zoom Configuration
X

? The email, public and secret key values should be from the Zoom owner account.

API URL:

Account Email:

Public Key:

Secret Key: 👁

Allow Webinars: Yes No

Default to Waiting Room: Yes No

Create Zoom Accounts: Yes No

| Available Zoom Templates: | Name | Id | Type |
|---------------------------|--------------------------------|-------------------------------|---------|
| | Support Services Template | <input type="text" value=""/> | Meeting |
| | Sales Team Template | <input type="text" value=""/> | Meeting |
| | Customer Facing (No recording) | <input type="text" value=""/> | Meeting |

Save

Cancel

Figure 1: Zoom Configuration window

Customers should enter the email address associated with the “owner” of the Zoom account. All Zoom instructors should and will have “User” accounts associated with this primary owner account.

The Public Key and Secret Key can be found by logging into the Company's Zoom account as the account "owner". Navigate to the Advanced menu item on the left hand side and click the "App Marketplace"

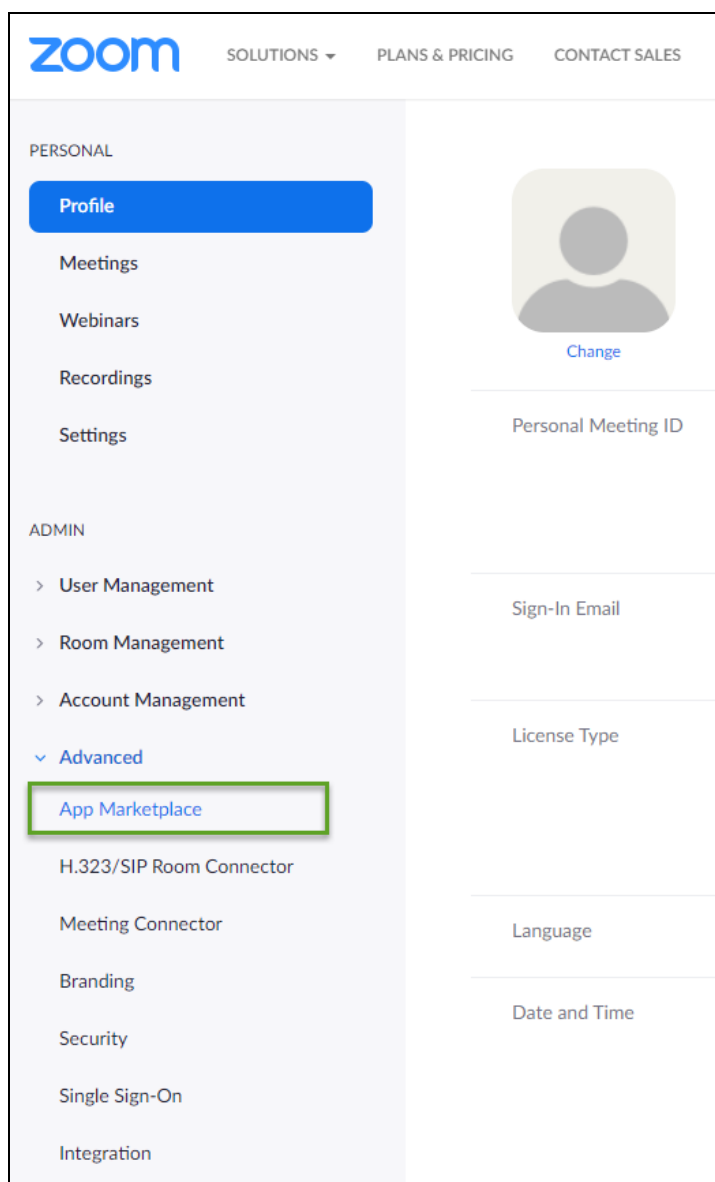


Figure 2: App Marketplace link

Select the "Develop" drop down from the upper right hand corner and then select "Build App".

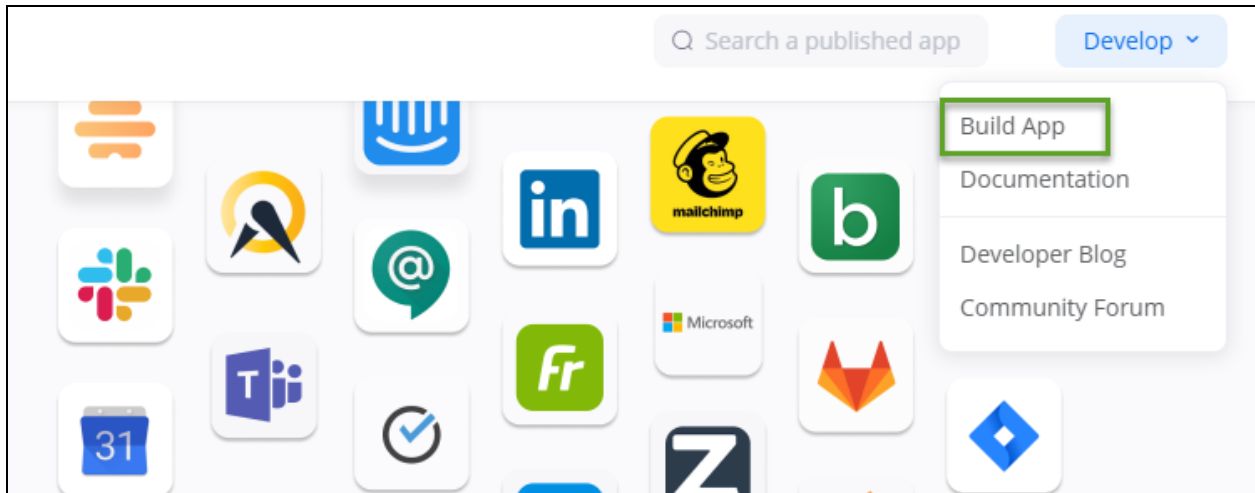


Figure 3: Build App Link

The first selection in the “Choose your app type” is JWT. Select the “Create” option and generate the App Credentials.

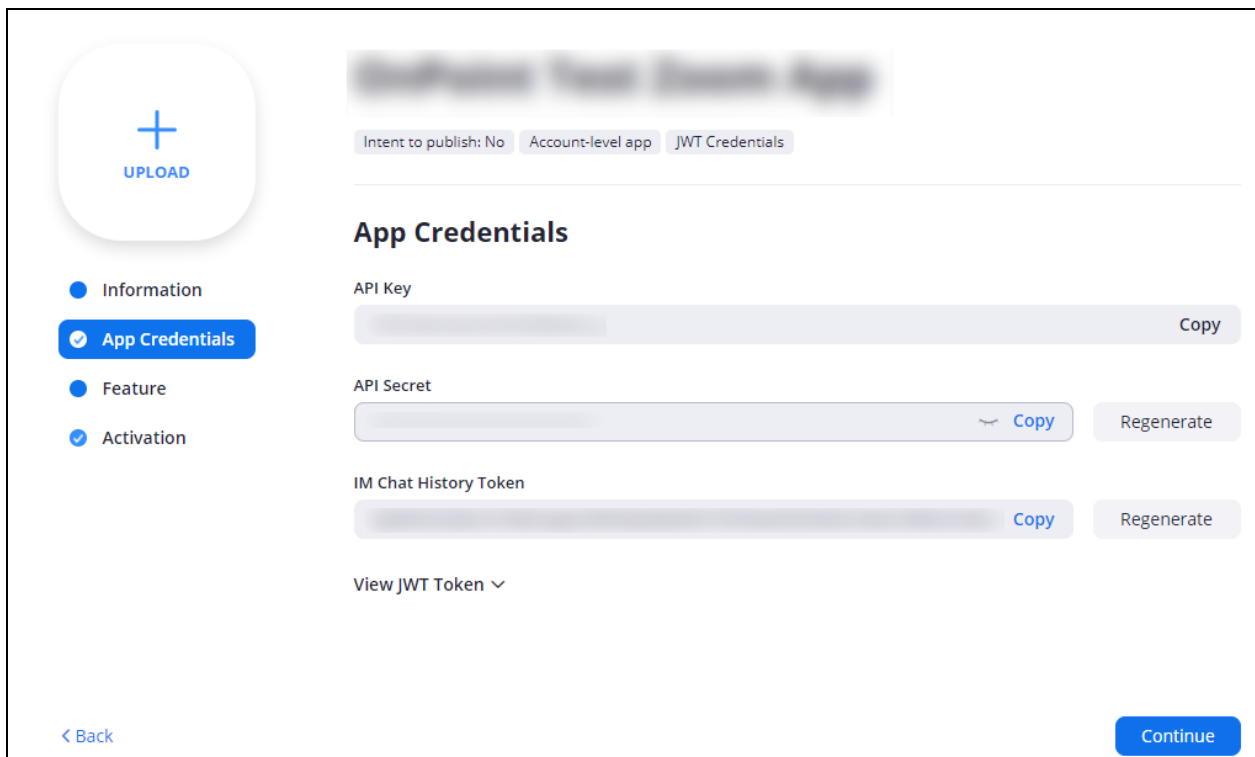


Figure 4: App Credentials view

These are the API credentials needed for the connection to the “Owner” account. It is important to understand that API keys can be established for individual Host accounts, but those should not be used for the Customer level configurations. These values can then be captured and input into the Zoom configurations for the customer.

If the “Replace” button is clicked or the keys are regenerated on the Zoom-side, both keys will need to be re-entered in OPCM.

The other options within the OPLS configuration window should be set based on licensing and usage:

- **Allow Webinars** - Zoom supports both “Meetings” and “Webinars”. While all Zoom instructors may create and manage Meetings, Zoom charges an additional fee for each instructor to create Webinars. If a customer is planning to use only Zoom Meetings, the “Allow Webinars” option can be turned off to remove the option and reduce confusion when creating Zoom sessions in OPCM. For further information please see the relevant Zoom documentation on Meetings and Webinars (<https://support.zoom.us/hc/en-us/articles/115005474943-Meeting-and-webinar-comparison>).
- **Default to Waiting Room** - This configuration defines whether Zoom Meetings created through the OPLS should have the waiting room enabled by default. Waiting Rooms are not available for Zoom Webinars.
- **Create Zoom Accounts** - Zoom allows for creation of new users within Zoom through the API. When enabled, this will create any user that Joins a Meeting or Webinar through the OPLS as a Free Basic User in the Zoom Tenant. Users are created using the Action: “Create” option that is defined here from Zoom:

Create — The user receives an email from Zoom containing a confirmation link. The user must then use the link to activate their Zoom account. The user can then set or change their password.

Users that have been added to the Zoom Tenant will be provided a Zoom ID that is able to be tracked and provided for attendance purposes.

The attendance functionality of the OnPoint Zoom integration is strongly impacted by the Create Zoom Accounts setting. If this configuration is set to No, then users without a Zoom account will join the session as a guest. [As of early 2021, the Zoom APIs provide only a single “name” field to identify guests, preventing automatic attendance for these users and requiring instructors to check for matches to confirm attendance.]

Alternatively, if the Create Zoom Accounts configuration is set to yes, free user accounts will be automatically created for users joining through the OPLS, allowing for the automated process to confirm attendance without requiring additional instructor action.

- **Available Zoom Templates** - Zoom supports the creation of Admin-level templates unique from individual Host templates. These Templates allow for setting up the templates for specific Meetings or Webinars and creating Sessions which follow those templates. Zoom Templates must be enabled at the account level for this functionality to be available. Templates that have been created will appear in this section to indicate the current established Templates. Use of Templates will be discussed more below when creating a Session.

Zoom In Meeting (Advanced) Participants

This is addressed later in the document, but in order to receive any information about Guest participants in a Zoom Meeting or Webinar, there is an identified configuration in the Zoom Account Settings that must be enabled. If this value is disabled, then the OPLS will not receive information about Guests that join meetings.

In order to enable this function, the Zoom admin should navigate to the Profile Settings page. Within the Admin section, navigate to the “In Meeting (Advanced)” section. Scroll down to the Setting labeled “**Identify guest participants in the meeting/webinar**”. This setting must be set to be enabled if guests are allowed to join sessions, otherwise the Zoom APIs will not provide any information about the Guest and there will be no indication that they joined the meeting outside of the Zoom Admin account.

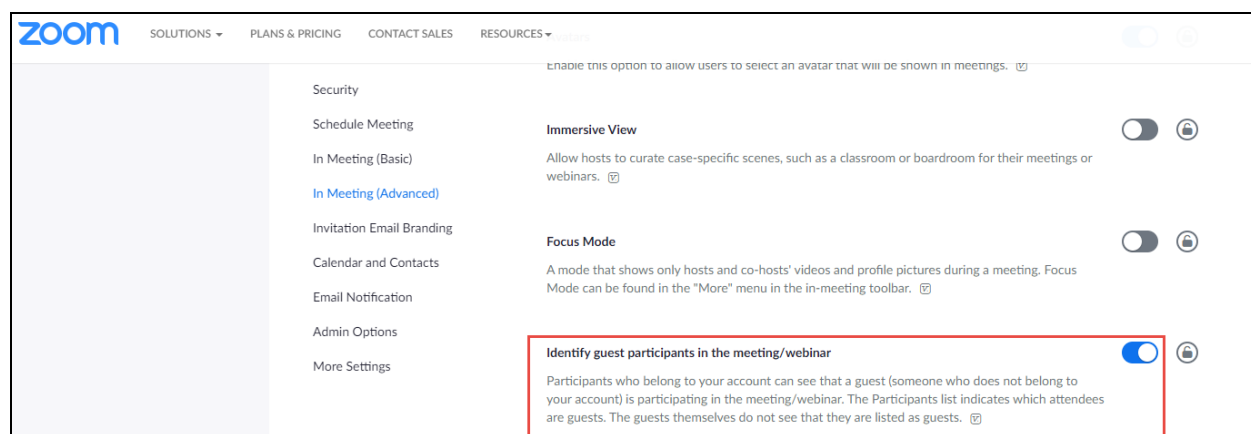


Figure 5: Guest participants settings within Zoom

Enabling Zoom Instructors

Once the API connection has been established, instructors can be configured to be Zoom hosts. Similar to configuring instructors to host Cisco *WebEx* and Adobe *Connect* webinars, the first step of this is accomplished via setting the “**Zoom Host**” option to “Yes” and clicking Save on the Edit page of the user’s Profile tab in *Course Manager*.

USERS & GROUPS: USER PROFILE

Information Assignments Recommendations Memberships **Profile**

User: **Zoom, Bob** (#3680785)

Instructor: Yes No

WebEx

Host ID:

Password:

Adobe Connect

Password:

Zoom

Zoom Host: Yes No

When instructors are first designated as hosts, Zoom will send them a validation email. The instructor cannot be assigned as an event Zoom session host until they have responded to the email.

Figure 6: Setting an instructor to be a Zoom host

Zoom *Meeting* and *Webinar* functionality is based around unique email addresses. If multiple instructors share an email address and are set to be Zoom hosts, the Zoom *Meetings* and *Webinars* may be created incorrectly. OnPoint strongly recommends that instructors have unique email addresses before being set as Zoom hosts.

Instructors must be authenticated as Zoom hosts before they may be set to instruct Zoom sessions. There are two possible paths for authenticating the Zoom host depending on if a Zoom account already exists with the instructor's email address:

- Instructor has an existing Zoom account associated with the owner's account -**

If there exists a "user" account associated with the owner's account with the instructor's email address, then OnPoint and Zoom accounts will be connected and the instructor may begin hosting sessions. This is the preferred method of validating Zoom accounts for instructors.
- Instructor does NOT have a Zoom account associated with the owner's account -**

If there is not a "user" account associated with the owner's account with an email address matching the instructor's email, then a new account will be created for the instructor. This will be a "Basic" account. For more information please see the relevant Zoom documentation on Account Types (<https://support.zoom.us/hc/en-us/articles/201363173-Account-types>).

As indicated in the blue box on the Profile tab, creating an account via this method will send a validation email to the instructor. The instructor must activate their Zoom account from the email and sign up using their email and a password before they may begin hosting sessions. If you wish for the instructor to have additional rights beyond a basic account, such as becoming a licensed host or being able to host webinars, the account can be edited within Zoom after the instructor completes the email activation.

Once an instructor has been created and verified through the APIs, that instructor can be set to instruct Zoom sessions in the OPLS.

Configuring Zoom Meetings / Webinars

Zoom Meetings and Webinars have a set of customer-level configurations which allow for granular control of setting the standard values to be sent to Zoom when creating a Meeting or Webinar. These configurations are used for all sessions and cannot currently be changed for an individual session except via the use of a Zoom template.

To establish the specific configurations for the OPLS environment, it is important to review these configs with your OnPoint Engagement Manager to ensure the correct settings are determined. These settings include all available API values for a Meeting or Webinar but the key settings are detailed below.

- **host_video** - True or False, determines whether to start meetings with the host video already enabled.
- **meeting_authentication** - True or False, used to determine if only authenticated users may join the meeting. If set to False, users without a qualified Zoom account can join by entering a name and joining as a Guest.
- **waiting_room** - True or False, sets whether the Waiting Room feature is utilized. If set to True, this disables the *join_before_host* setting.

These values are configured at the customer level by an OnPoint Technical specialist according to the Customer preferences. Once set, all Meetings or Webinars created through the OPLS Integration will adhere to the configured values except in the situation where a Zoom Template is used when creating a Session. Zoom Templates adhere to the Meeting or Webinar settings established as part of the Template.

Zoom Session Management

Once the Zoom integration has been configured for a customer, the next step is to create Zoom Events and Sessions. Zoom events are a type of webinar event, so customers who have utilized Cisco *WebEx* or Adobe *Connect* through the OnPoint system should be familiar with this process.

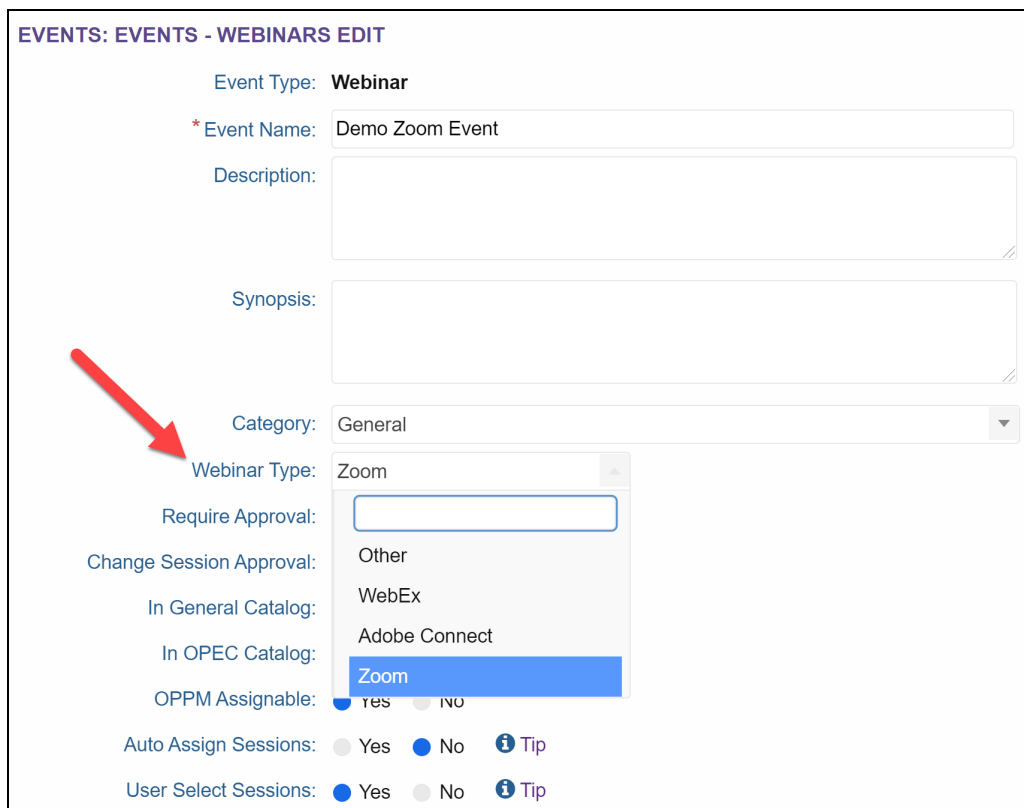
All of the same data that was recorded for the other webinar types is recorded for Zoom events and sessions, and all of it can be made available through the existing event reports.

Zoom Webinar Event & Classes

In order to create and manage Zoom sessions, the Zoom event must first be created. This event must be created as a new webinar event rather than converting an existing event to Zoom.

To create the Zoom webinar event, navigate to the webinar event list (*OPCM > Events & Activities > Webinars*) and click on “**Add Event**”. The fields and options should be familiar to those customers who have utilized OnPoint’s event functionality in the past, but for those unfamiliar with it please consult the documentation on Events.

When creating the Zoom event, ensure the “**Webinar Type**” is appropriately set to “Zoom”.



The screenshot shows the 'EVENTS: EVENTS - WEBINARS EDIT' form. The 'Event Type' is set to 'Webinar'. The 'Event Name' is 'Demo Zoom Event'. The 'Description' and 'Synopsis' fields are empty. The 'Category' is 'General'. The 'Webinar Type' dropdown menu is open, showing options: 'Zoom', 'WebEx', and 'Adobe Connect'. The 'Zoom' option is selected and highlighted in blue. A red arrow points to the 'Zoom' option. Below the dropdown, there are several other fields: 'Require Approval' (input field), 'Change Session Approval' (Other), 'In General Catalog' (WebEx), 'In OPEC Catalog' (Adobe Connect), 'OPPM Assignable' (radio buttons for Yes and No), 'Auto Assign Sessions' (radio buttons for Yes and No, with a Tip icon), and 'User Select Sessions' (radio buttons for Yes and No, with a Tip icon).

Figure 7: Creating a Zoom webinar event

Once the event has been created, one or more classes should be added from the Classes tab according to the intended usage of the event. There is no Zoom-specific functionality at the class level except for when selecting the Default Instructor; only those instructors set as Zoom Hosts are listed (see below for more information.)

Creating a Zoom Session

The process to create Zoom sessions follows the same flow as creating other webinar sessions, but there are a few additional Zoom-specific options. Any session functionality not listed here remains the same as that available for other webinar sessions (such as Cisco *WebEx* and Adobe *Connect*.)

The screenshot displays the 'EVENTS: WEBINAR SESSION' interface. At the top right, it shows 'Event: Demo Zoom Event ID:1001095, Class: Demo Zoom Class'. Below this are tabs for 'Session', 'Registration', 'Enrollment', 'Resources', 'Instructors', and 'Notes'. The 'Session' tab is active. The form includes the following fields and options:

- Time Zone: America/New_York
- * Zoom Host: (Required field)
- Zoom Type: Scheduled Meeting
- Zoom Template: Select template
- Zoom Passcode: Waiting room. A 'Generate Passcode' button is available with the note '(10 characters max, Zoom waiting room if not specified)'. A 'C' icon is also present.
- Max Registrations: Unlimited (click to edit)
- Accepted Join Time: Pre 15, Post Start 15 minutes
- Session State: Start
- Session Status: Pending, Approved, Cancelled, Delete

Figure 8: Creating a Zoom session

When creating a Zoom session, instructors must specify a Zoom Host, the Zoom Type, and a Zoom Passcode.

- Zoom Host** - The “Zoom Host” field replaces the standard “Primary Instructor” when creating or viewing Zoom sessions. Clicking into this field provides a list of all instructors on the slice who have been configured as Zoom Hosts, as well as displaying whether each Host has a “Basic” or “Licenced” account and their Zoom-registered email address.

For more information please see the relevant Zoom documentation on Account Types (<https://support.zoom.us/hc/en-us/articles/201363173-Account-types>).

When Zoom sessions are created they are associated with the selected Zoom Host. If the session is created and the Host is changed at a later date, **the Zoom Meeting or Webinar will be deleted and re-created in the Zoom system**. Instructors and learners accessing the session via OnPoint *Performance Manager*, *Content Viewer* or *CellCast* will be unaffected, but if the join link is shared outside the system (such as via email) then learners might have difficulty accessing the session.

If a new Host is required and the join link has been shared outside of the system, please consider adding the Host as an Additional Session Instructor instead. Due to Zoom restrictions **only Licensed Zoom Hosts may be added as Additional Session Instructors**.

The screenshot shows a web interface for managing a Zoom session. At the top, it says 'EVENTS: WEBINAR SESSION' and 'Event: Demo Zoom Event (#1001095), Class:'. Below this are several tabs: 'Session' (selected), 'Registration', 'Enrollment', 'Resources', 'Instructors', and 'Notes'. The main form area contains several fields: 'Time Zone' (set to 'America/New_York'), 'Zoom Host' (with a dropdown menu open showing a list of users), 'Zoom Type' (set to 'asd, bob40'), 'Zoom Passcode', 'Max Registrations', 'Accepted Join Time', 'Session State', and 'Session Status'. A 'Custom Fields' section is partially visible at the bottom.

Figure 9: Selecting a Zoom Host for a session

- Zoom Type** - This option allows administrators to choose between “Scheduled Meeting” and “Zoom Webinar.” The Zoom session will be created as the selected type and cannot be changed without deleting and re-creating the session. If the “Allow Webinars” configuration is disabled then “Scheduled Meeting” will be the only option for this field.
 For further information please see the relevant Zoom documentation on Meetings and Webinars (<https://support.zoom.us/hc/en-us/articles/115005474943-Meeting-and-webinar-comparison>).
- Zoom Template** - Select from the available list of Zoom Templates. If a template is not selected, the session will create the Meeting / Webinar with the default settings. Template setup is outlined in the next section.
- Zoom Passcode** - The Zoom Passcode is the code required for accessing the Zoom session. Like the Zoom Type, the passcode cannot be changed for existing sessions without deleting and re-creating the session. The system auto-generates a passcode, but this may be overridden when creating a Zoom session. It is important to ensure that entered passcodes adhere to the configured passcode requirements in Zoom.

Once all standard and Zoom-specific fields are completed, clicking Save creates the session in both *Course Manager* and the Zoom environment.

Managing Zoom Templates

Zoom provides for Templates that are established at the Account level and can be made available to all Hosts. The functionality must be enabled within each customer’s Zoom account by contacting Zoom support to have the Feature added to their Account. Once enabled by Zoom there is a new set of options that appear within the Zoom settings.

To locate these options, navigate to Account Settings under the Admin Settings then select Schedule Meeting.

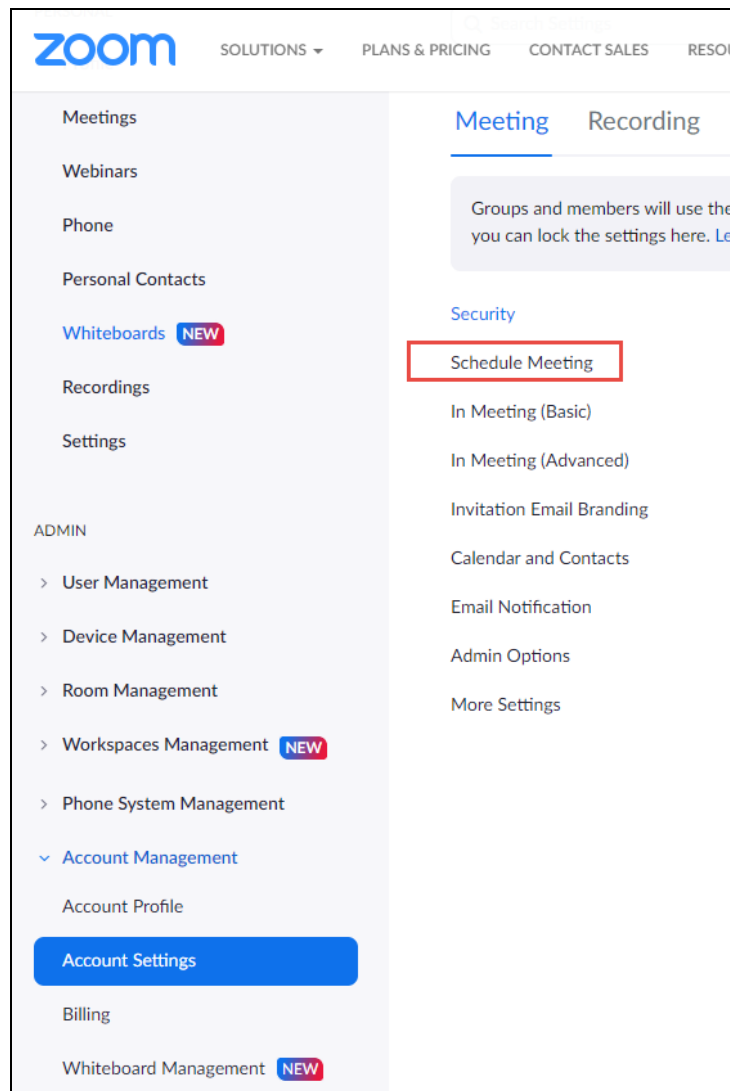


Figure 10: Zoom Settings Menu

From the Schedule Meeting selection, scroll down to the “Meeting Templates” or “Webinar Templates” section.

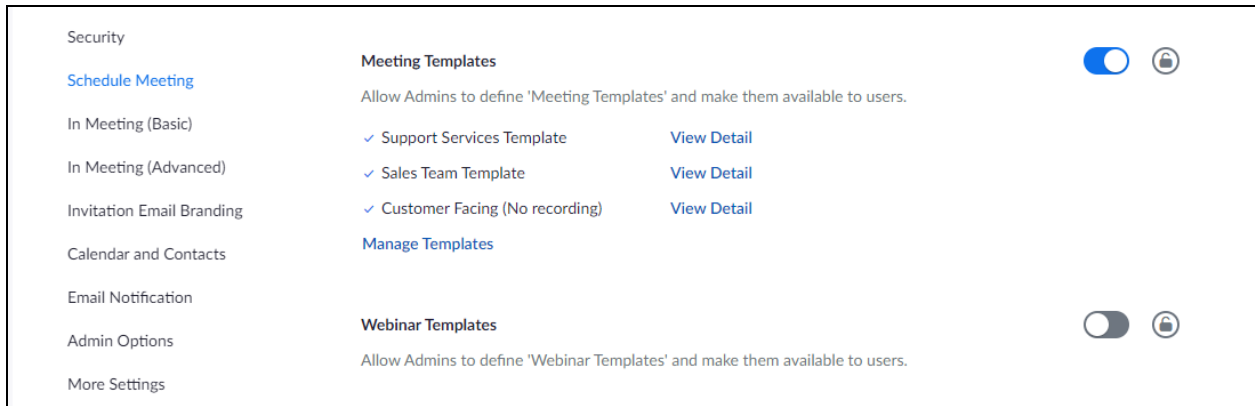


Figure 11: Templates list

The functionality can be enabled here for Meetings or Webinars, then the “Manage Templates” link provides for creating and editing any existing Admin Templates.

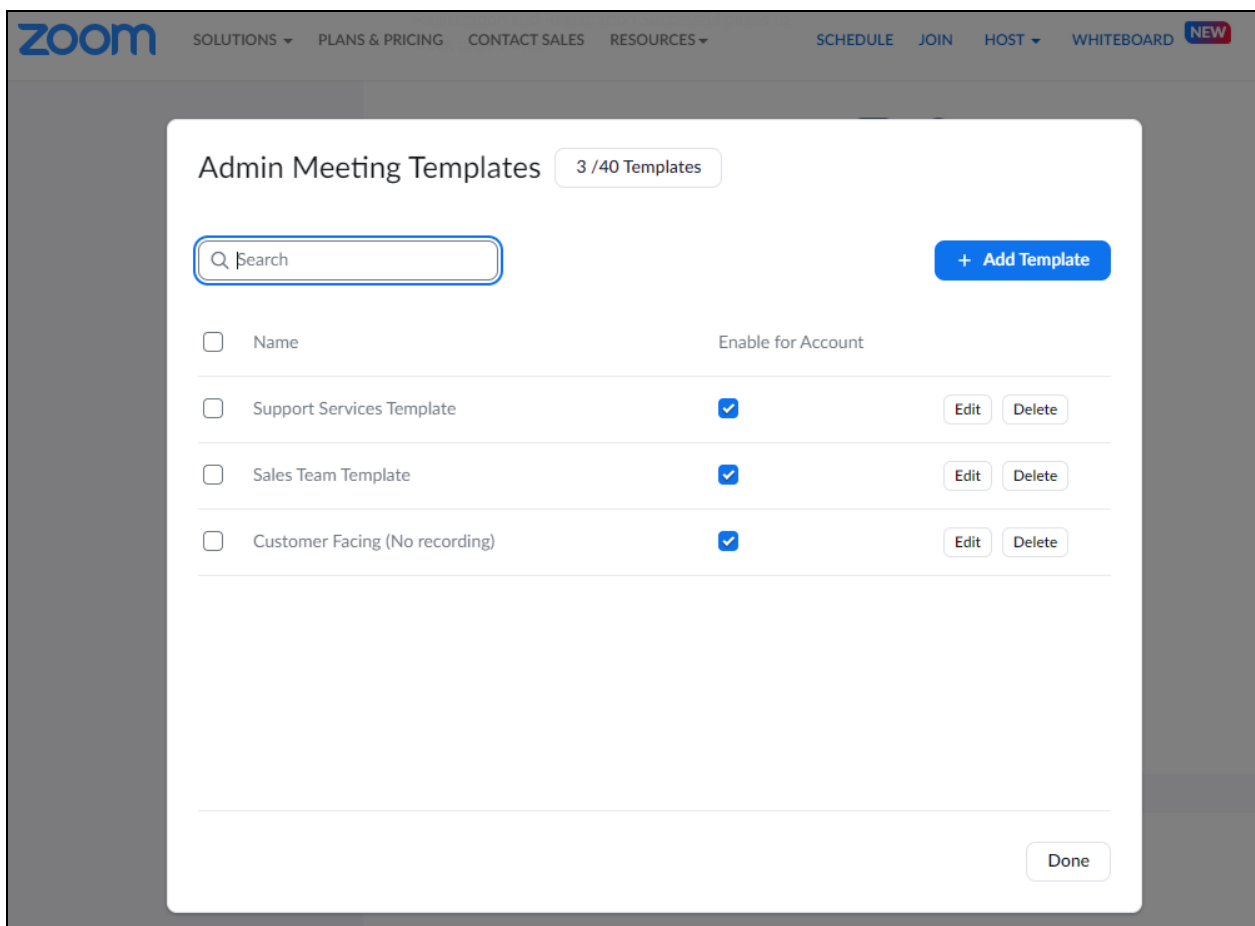


Figure 12: Templates list

Only Admin Templates are available to be selected from the OPLS when creating an Event Session. The list shown are examples, but any established Admin Templates will appear for the specific Customer Account.

Managing a Zoom Session

As mentioned above, editing certain fields for existing sessions will cause the Zoom *Meeting* or *Webinar* to be deleted and re-created in the Zoom environment. This has no effect on the OnPoint session or for instructors and learners accessing via OPPM, OPCV, or CellCast, but if the join link is shared outside of the system the new link may need to be re-shared.

Editing the **Zoom Host** field will cause the Zoom *Meeting* or *Webinar* to be deleted and re-created.

Editing other fields (such as the date or time) updates the Zoom *Meeting* or *Webinar* without requiring it to be deleted and re-created.

Instead of being a drop down selection field, the “Zoom Type” field is a clickable link for existing sessions.

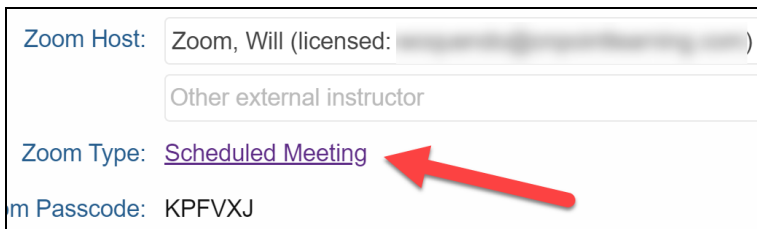


Figure 13: Zoom Type within Zoom session

Clicking on this link opens a window which displays information about the Zoom session, such as the Zoom-side UUID and ID, the Host’s email, as well as the session status, start time, and passcode. This window also includes the Join URL for the Zoom session. This URL is automatically utilized when learners join the session from OnPoint *Content Viewer* or *CellCast*, so this URL is provided so administrators can share it outside of the system if they so choose.

If the “**Embed Passcode in URL**” configuration is enabled, anyone with the URL can join the Zoom *Meeting* or *Webinar*, even those without accounts in the system. Therefore it is advisable to limit the sharing of the Join URL to *those* individuals who should be in the session.

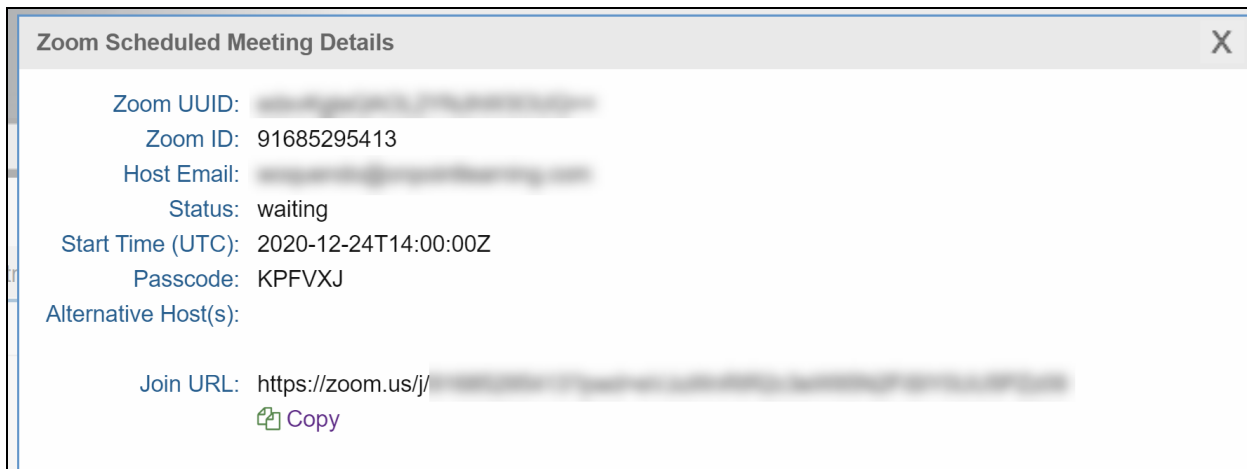
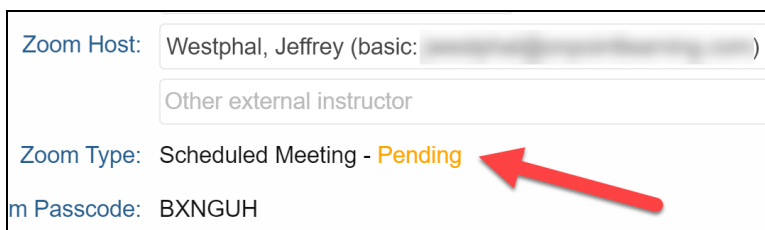


Figure 14: Zoom Scheduled Meeting Details view

If a newly created Zoom session instead displays “Pending” next to the Zoom Type, this is an indication that the selected Zoom Host is mis-configured or has a Zoom account issue. As a result no corresponding Zoom *Meeting* or *Webinar* has been created in the Zoom platform. In such situations it is advised to check the Host’s credentials in both *Course Manager* and Zoom and to attempt to re-create the session.



Zoom Host: Westphal, Jeffrey (basic: [redacted])
 Other external instructor
 Zoom Type: Scheduled Meeting - Pending
 Zoom Passcode: BXNGUH

A red arrow points to the word "Pending" in the Zoom Type field.

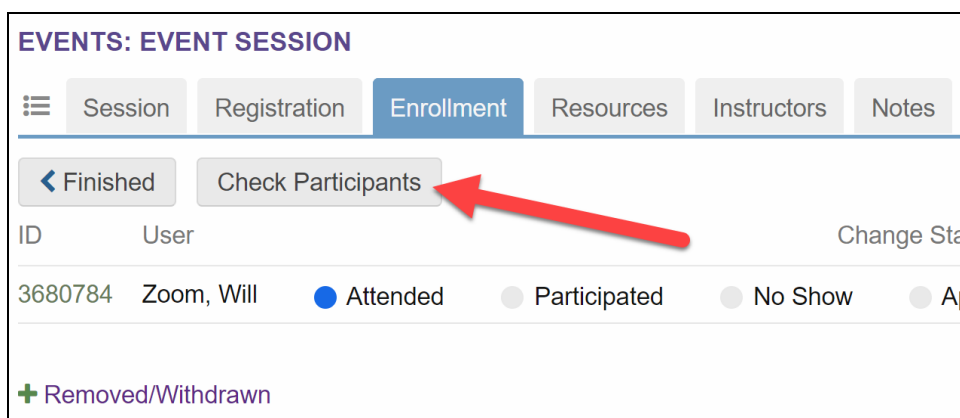
Figure 15: Selecting a Zoom Host for a session

Session Attendance

In addition to the standard event session attendance functionality, the Zoom integration automatically checks learner participation in Zoom sessions and updates attendance based on established customer and session configurations.

Please note that the accuracy of the matching of existing users depends on whether or not all attendees are within the Customer’s Zoom Tenant. If users are accessing from accounts outside of the Zoom Tenant and the “Create User” function is not enabled, then the attendance lookup will only be able to match to existing users who are assigned to the session based on the singular provided Name value from Zoom.

Once the End Time for a Zoom Session has passed, an automatic process runs to check which learners attended the session and for how long each participated. This process typically returns attendance information within one hour of the End Time of the session. This process can be checked and run manually if desired, by clicking on the “**Check Participants**” button on the Enrollment tab of the session.



EVENTS: EVENT SESSION

Session Registration **Enrollment** Resources Instructors Notes

< Finished Check Participants

| ID | User | Change Status |
|---------|------------|---|
| 3680784 | Zoom, Will | <input checked="" type="radio"/> Attended <input type="radio"/> Participated <input type="radio"/> No Show <input type="radio"/> Ap |

+ Removed/Withdrawn

A red arrow points to the "Check Participants" button.

Figure 16: Check Participants button on session Enrollment tab

In addition to the attendance check, this button opens a window displaying a list of all users who attended the Zoom *Meeting* or *Webinar*, including their names, email addresses (if known), duration in the session, and their resultant statuses for the session. This list includes all participants who joined the session, even those who are not assigned to the session or do not have an account in the system.

Zoom Participation tracking utilizes the User's unique Zoom ID or email address to match to existing users, if the user's account is in the Customer's Zoom Tenant. As can be seen below, the matching is first attempting to match on the user's recorded Zoom ID. If there is no match there then that means that the user is not in the Customer's Tenant and matches must be performed against the First and Last Name. If there are no matches found, the Participant information is displayed but would need to be acted upon by an Instructor or Admin to mark attendance.

| Zoom Scheduled Meeting Participants | | | |
|-------------------------------------|--------------|----------|-------------------------|
| Minumum required duration 01:42:00 | | | |
| ID | Name | Duration | Session Status |
| 0 | A [REDACTED] | 01:29:51 | Unknown |
| 104116 | [REDACTED] | 02:06:25 | Not Assigned to Session |
| 0 | J [REDACTED] | 01:30:44 | Unknown |
| 0 | R [REDACTED] | 43:39 | Unknown |
| 0 | r [REDACTED] | 49:17 | Unknown |
| 0 | t [REDACTED] | 01:31:26 | Unknown |

Figure 17: Zoom [Session] Participants window

The possible "Session Statuses" and their meanings are as follows:

- Attended** - The learner is registered for the session and participated in the Zoom Meeting or Webinar. If the session has a "Minimum Participation" value and the learner participates for the required time this process will mark them as Attended for the session. If the session does not have a "Minimum Participation", learners will earn this status upon joining the Zoom Meeting.

Learners with "Attended" will be marked as "Attended" for the underlying OPLS webinar session as well, giving them credit towards event completion; administrators or instructors do not need to separately mark these users as Attended.

- Insufficient Time** - The learner is registered for the session and participated in the Zoom Meeting or Webinar, but the session has a "Minimum Participation" value and the learner did not spend enough time in the session to be considered "Attended".

Learners with "Insufficient Time" will be marked as "Participated" for the underlying OPLS webinar session if the Participated status is enabled for a customer, otherwise they will retain a status of "Approved" for the session. Administrators or instructors may still manually move these learners to "Attended" as appropriate.

- **Not Assigned to Session** - The learner is not registered for the session but joined and participated in the Zoom Meeting or Webinar. As they are not registered for the session they will not gain any credit for doing so.

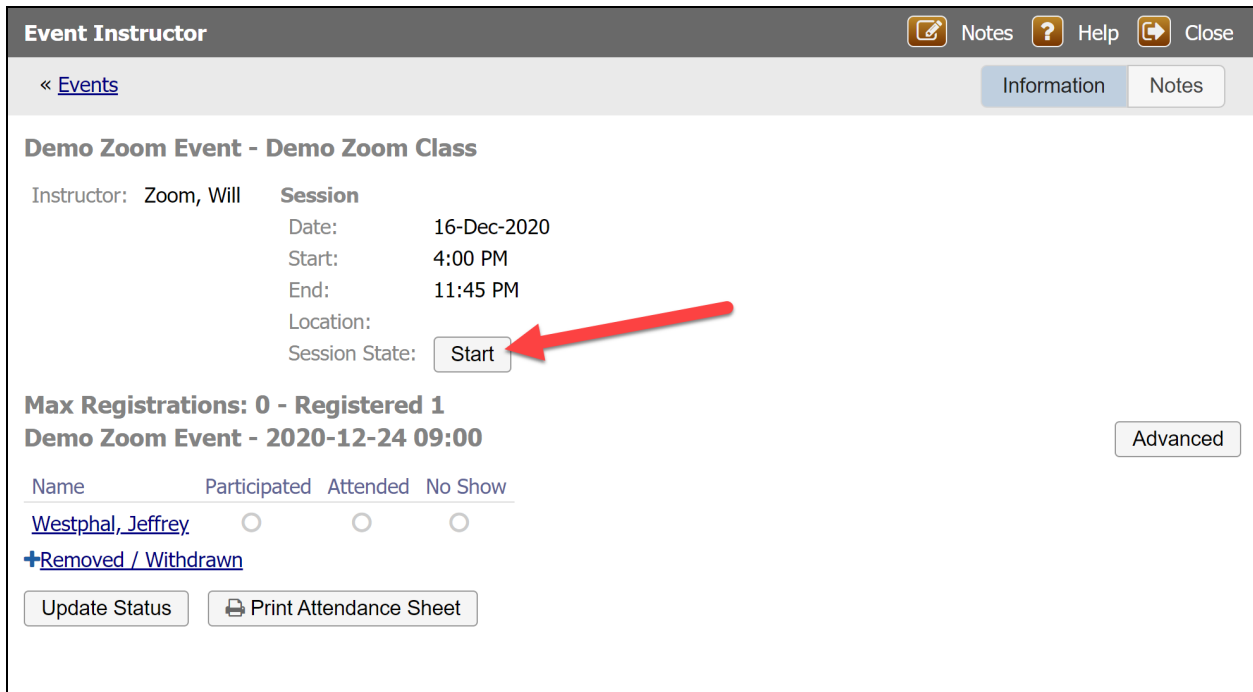
If the learner later registers for this session and the Check Participants button is again clicked for the session, they will be re-evaluated and assigned one of the previous two statuses instead.

- **Not in System** - The learner joined the Zoom Meeting or Webinar using an account not associated with any users in the system. As they are not registered for the session they will not gain any credit for doing so.

Once the End Time of the session has passed and the attendance process is run, these learner statuses will remain the same until an administrator clicks on “Check Participants” on the session Enrollment tab. Doing so will recheck all learner participation and update the statuses as appropriate.

Instructor Experience

Both the Zoom Host (primary instructor) and alternate Hosts (additional session instructors) can start Zoom Meetings and Webinars. They can do this via the Start buttons available in *Content Viewer*, *Digital Classroom*, or a custom interface (exact methods can vary). This will open the Zoom Meeting or Webinar in a new tab, from where the Host(s) will manage the ongoing session using the suite of tools available in Zoom.



The screenshot shows the 'Event Instructor' interface for a Zoom session. The title bar includes 'Event Instructor' and navigation icons for Notes, Help, and Close. Below the title bar, there is a breadcrumb navigation link '<< Events' and two tabs: 'Information' (selected) and 'Notes'. The main content area displays the following information:

- Demo Zoom Event - Demo Zoom Class**
- Instructor: Zoom, Will
- Session**
- Date: 16-Dec-2020
- Start: 4:00 PM
- End: 11:45 PM
- Location:
- Session State: **Start** (highlighted with a red arrow)

Below the session details, it shows registration information:

- Max Registrations: 0 - Registered 1**
- Demo Zoom Event - 2020-12-24 09:00**
- An 'Advanced' button is visible on the right.

A table lists participants:

| Name | Participated | Attended | No Show |
|-----------------------------------|-----------------------|-----------------------|-----------------------|
| Westphal, Jeffrey | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

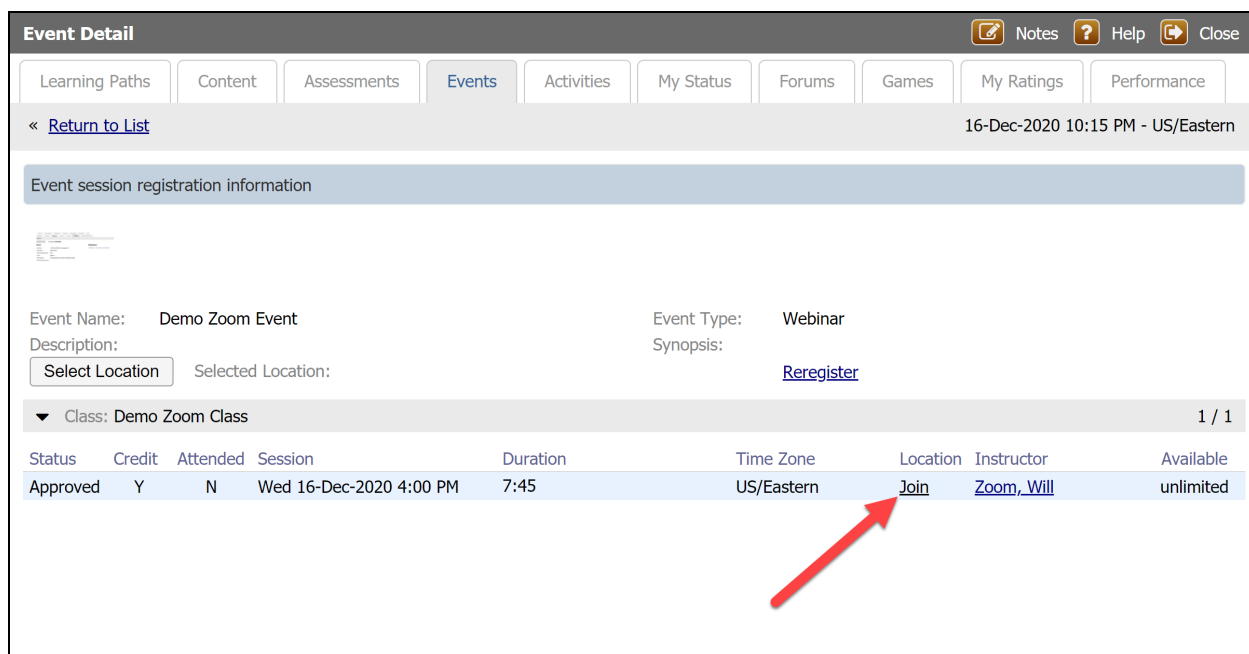
Below the table, there is a link '+Removed / Withdrawn' and two buttons: 'Update Status' and 'Print Attendance Sheet'.

Figure 18: Join link in OPCV for a Zoom session

Learner Experience

The process to register or be registered for a Zoom session is the same as that for other webinar event types, see the Event documentation for further details.

The methods to join an ongoing Zoom session are also the same as other webinar types. Learners can join from OnPoint's *Content Viewer* interface by clicking on the "Join" link or from a custom interface (exact method varies by interface.) In either case, the Zoom *Meeting* or *Webinar* will be opened in a new tab.



The screenshot shows the 'Event Detail' page for a 'Demo Zoom Event'. The page includes navigation tabs (Learning Paths, Content, Assessments, Events, Activities, My Status, Forums, Games, My Ratings, Performance) and a 'Return to List' link. The event session registration information is displayed, including the event name, type, description, and a 'Select Location' button. Below this, a table lists the session details:

| Status | Credit | Attended | Session | Duration | Time Zone | Location | Instructor | Available |
|----------|--------|----------|-------------------------|----------|------------|----------------------|----------------------------|-----------|
| Approved | Y | N | Wed 16-Dec-2020 4:00 PM | 7:45 | US/Eastern | Join | Zoom, Will | unlimited |

A red arrow points to the 'Join' link in the Location column of the session table.

Figure 19: Join link in OPCV for a Zoom session

If the "Default to Waiting Room" customer-level configuration is enabled, learners who join Zoom Meetings will enter the waiting room rather than joining straight into the session. Learners joining a Zoom Webinar will always join the session directly.

Zoom API Technical Overview

The Zoom integration utilizes the existing Zoom APIs to communicate and perform additions and updates to Zoom meetings and webinars and to manage those participants added through the OPLS. OnPoint has incorporated a secured gateway application to interact with the Zoom API for purposes of creating Zoom users where appropriate, scheduling Meetings and Webinars, and retrieving participant information.

This section provides a technical overview of the APIs utilized in the OnPoint Zoom integration. The current Zoom API version (2.0.0) is used in all cases with documentation of that API found here:

<https://marketplace.zoom.us/docs/api-reference/using-zoom-apis>
<https://marketplace.zoomgov.com/docs/api-reference/using-zoom-apis>

API methods for Zoom.us and Zoom.gov are the same and are documented here from the Zoom.gov API documentation.

Authentication

Authentication and API requests are performed over HTTPS using the JWT (JSON Web Token) method to provide secure data transmission. Every request to the API is secure and must contain a valid token in the header. The JWT method used is outlined in the documentation linked above.

All individual methods use the configured zoom.gov or zoom.us url endpoint to prepend to all API methods when making requests. This is configured as part of the initial set up and that url specific to the customer's account is used for all subsequent API methods.

Zoom Meeting Methods

Create Meeting

Zoom meetings are created in the OnPoint Course Manager (OPCM) application once the module has been enabled. When creating an Event Session of type 'Zoom', OPCM will call the `opzoom` method `createScheduledMeeting()` in the `ZoomMeeting` class. It in turn calls the `https://{Configured zoom.gov or zoom.us url}/v2/users/{userId}/meetings` API endpoint to facilitate the creation of the meeting. As in all other calls this is secured with a valid JWT token in the header. The user value used in creating meetings in Zoom is the email address of the identified Instructor from the OPLS.

If a successful response is received, the event is created in the OPLS system. A record of this created Session is also tracked in the OPLS for displaying the event session and allowing users to sign up as is configured for the session. All standard Event Session rules that are applicable to any other type of event session can be applied to Zoom events as well. This includes limits on seats, availability, and restrictions on a user's ability to enact change to their signed up session. If a password is not used to access the meeting, a Zoom waiting room will be incorporated.

NOTE (from Zoom API docs): This API has a daily rate limit of 100 requests per day. Therefore, only 100 *Create a Meeting API* requests are permitted within a 24 hour window for a user (Zoom Host).

The `start_url` of a meeting is a URL used by a host or alternative host to start a meeting. The expiration time for the `start_url` field is two hours for all regular users.

Create a Meeting

- [POST: /users/{userId}/meetings](#)

Update Meeting

When a Zoom event session is updated in OPCM the opzoom application calls the `https://{Configured zoom.gov or zoom.us url}/v2/meetings/{meetingId}` API endpoint to facilitate the updating of the meeting details. If a successful response is received the event is updated in the OPLS system.

Update a Meeting

- [PATCH: /meetings/{meetingId}](#)

Delete Meeting

When a Zoom event session is deleted in OPCM, the `https://{Configured zoom.gov or zoom.us url}/v2/meetings/{meetingId}` API endpoint is used to facilitate the updating of the meeting details. If a successful response is received. the event is deleted in the OPLS system.

Delete a Meeting

- [DEL: /meetings/{meetingId}](#)

Zoom Webinar Methods

Zoom customers with a Webinar Plan have access to creating and managing Webinars. Webinar allows a host to broadcast a Zoom webinar to up to 10,000 attendees. This option is set based on a configuration at initial setup and can be enabled or disabled in the OPLS through this configuration. If the option is not turned on for the customer then the ability to create Zoom Webinars will not appear in OPCM.

Create Webinar

Zoom webinars are created in OPCM. When creating an Event Session of type 'Zoom Webinar' OPCM calls the `https://{Configured zoom.gov or zoom.us url}/v2/users/{userId}/webinars` API endpoint to facilitate the creation of the webinar. As in all calls this is secured with a valid JWT token in the header. If a successful response is received the webinar is created in the OPLS system.

Create a Webinar

- [POST: /users/{userId}/webinars](#)

Update Webinar

When a Zoom webinar is updated in OPCM it in turn calls the <https://{Configured zoom.gov or zoom.us url}/v2/webinars/{webinarId}> API endpoint to facilitate the updating of the webinar details. If a successful response is received the webinar is updated in the OPLS system.

Update a Webinar

- [PATCH: /webinars/{webinarId}](#)

Delete Webinar

When a Zoom webinar is deleted in OPCM it calls the <https://{Configured zoom.gov or zoom.us url}/v2/webinars/{webinarId}> API endpoint to facilitate the updating of the webinar details. If a successful response is received the webinar is deleted in the OPLS system.

Delete a Webinar

- [DEL: /webinars/{webinarId}](#)

User Management Methods

In order to receive full details about attendance for a Zoom meeting, the user must be part of the Customer Zoom tenant. To ensure that the most complete information is provided back from Zoom, the process of a user Joining a Zoom session through the OPLS will attempt to find the user in the configured Zoom tenant. If the user's Zoom id is not found using the user's email address then the process will follow one of two paths based on configuration options implemented in the 8.4 OPLS release. A set of configurations has been added to allow for determining whether the process attempts to create the user's account in the Zoom tenant.

Instructors

When an Instructor is marked as a Zoom host, the process checks to determine if the OPLS has a recorded Zoom Id for the Instructor. If there is no Zoom ID, then the following API method is used to determine if the Instructor has a Zoom ID within the configured Zoom tenant.

Get a User

- [GET: /users/{userEmail}](#)

If this returns a Zoom ID, the ID is recorded as the Instructor's Zoom ID.

If there is no returned Zoom ID, then the following method is used to Create the Instructor's account in the Zoom tenant.

Create Users (ignores "Create Zoom Accounts" configuration for Instructors)

- [POST: /users](#)

*It is assumed that all Instructors would be or could be added to the Customer's Zoom Tenant.

The Create User process follows the described Activation Process from Zoom outlined below for a user.

Users

When a user attempts to Join a Zoom session, the process checks to determine if the OPLS has a recorded Zoom ID for the user. If there is no Zoom ID, then the following API method is used to determine if the user has a Zoom ID within the configured Zoom tenant.

Get a User

- [GET: /users/{userEmail}](#)

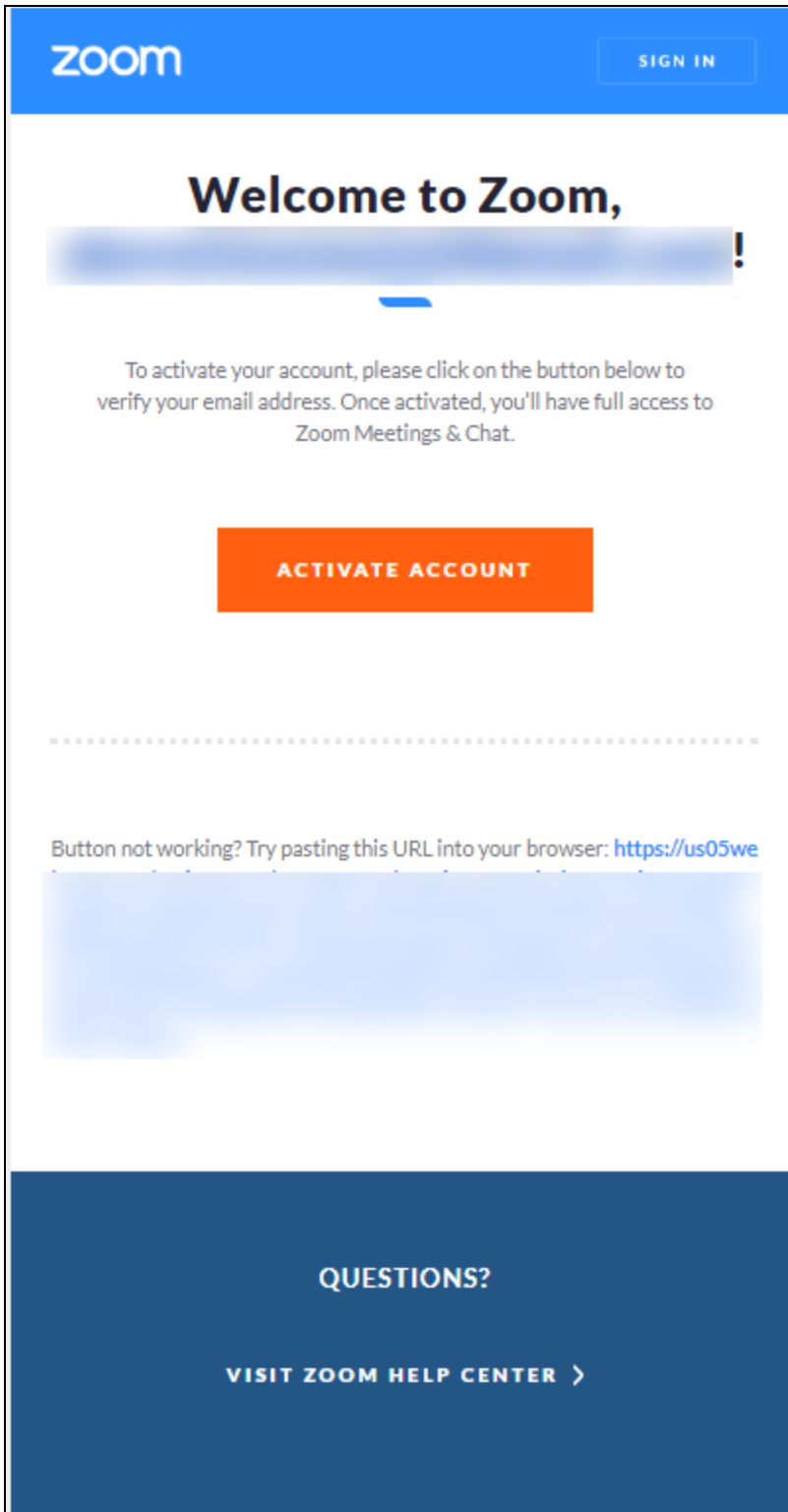
If this returns a Zoom ID, then the user is launched to the Join URL provided.

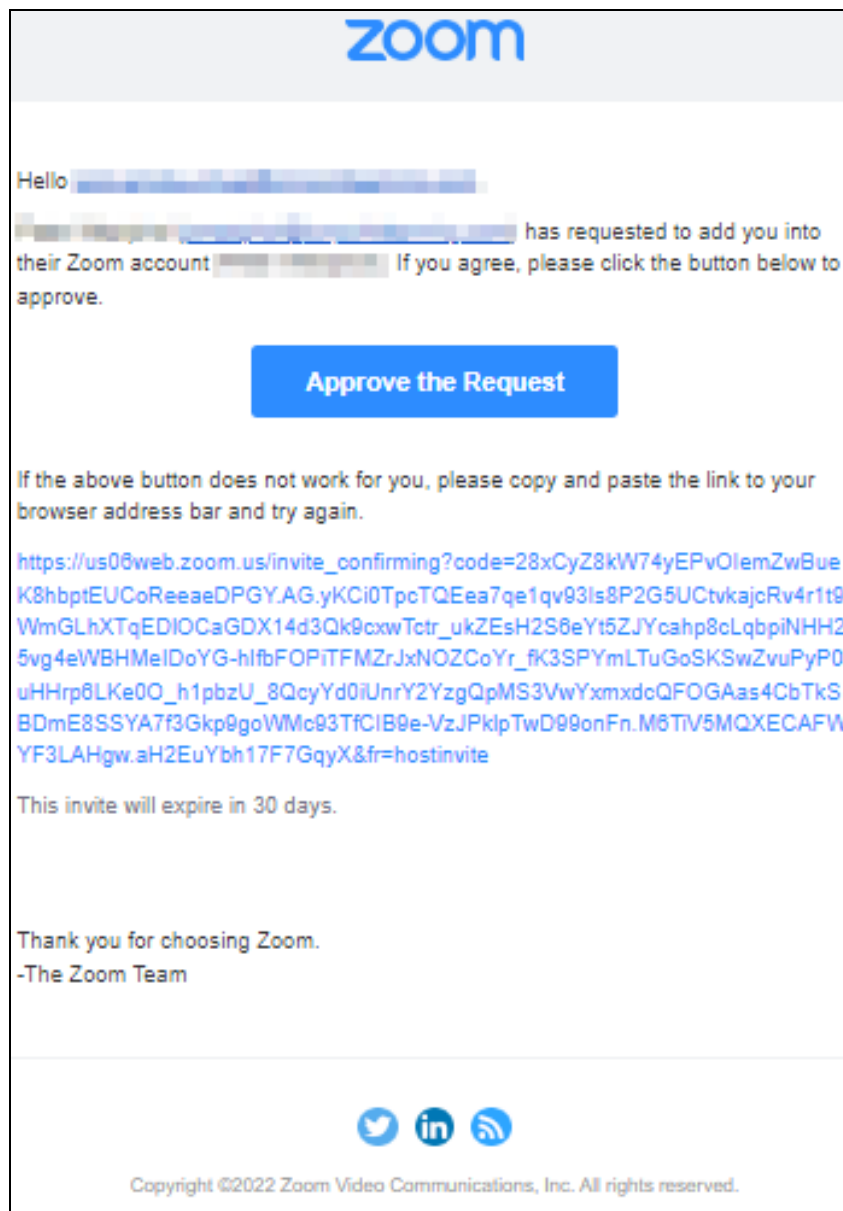
If there is no returned Zoom ID and the Customer is configured to Create User accounts, then the following method is used to Create the user's account in the Zoom tenant.

Create Users (Only When "Create Zoom Accounts" is enabled)

- [POST: /users](#)

If the Customer configurations for Zoom meetings are set to not allow Guests then this process will send the user an Account creation email from Zoom with a provided link that must be accepted before the user can be allowed into the Session. If the user has an existing Commercial Zoom Account they will receive an email from Zoom with a provided link requesting they LINK their account to the Zoom Tenant. The Account LINK is required to retrieve the Account Zoom ID from Zoom's API.





Session Participant Methods

Get Zoom Meeting and Webinar Participants

Once an event session has been closed or the end time has passed, background processes request the participant information from Zoom using the following two methods:

Get a Meeting Participant Reports

- <GET:/report/meetings/{meetingId}/participants>

Get a Webinar Participant Reports

- <GET:/report/webinars/{webinarId}/participants>

These methods provide information to allow for finding the user and determining the user's duration in the session if provided by Zoom. If the Session in OPLS is configured to require a minimum duration then a user will be marked as Participated for the session until the minimum duration is met. Otherwise the user is marked as Attended for the session based on the returned participant information.

As noted previously, whether a user is able to be matched will depend on the configurations for the Customer as the Zoom APIs will only provide detailed information for those individuals in the Customer Zoom Tenant. If Guests are allowed and the OPLS is not creating user accounts in the Zoom Tenant, then the participant reports will only provide a "name" property containing:

- The first and last name for Commercial Zoom Accounts
or
- The name entered by the Zoom Guest upon entry.

The process will attempt to match the "name" to an existing user's first and last name for all OPLS users in the session in order to mark attendance. If guests are allowed and the OPLS is not creating the Users in the Zoom account, then it is important that Instructors ensure that the attendance is reviewed to properly mark attendance for those whose names may not match what is recorded in the OPLS.

Custom Configuration Settings

If you need specialized meeting or webinar settings beyond those covered in this guide, please contact OnPoint Technical Support for assistance.