Oracle Fusion Talent Management

Integrate virtual classroom and calendar providers with Oracle Learning

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Author: Lynn Raiser

Contents

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1 Getting Started

Overview of virtual classroom and calendar integration with Oracle Learning

Learning specialists can manage virtual sessions, attendance, recordings, and calendar invitations by integrating virtual classroom and calendar providers with Oracle Learning. Instructors and learners can then schedule, join, and track online instructor-led meetings from Oracle Learning.

Key integration automation

Connect Oracle Learning with supported providers to sync meetings, registrations, attendance, recordings, and calendar invites.

Automation	What's synced	Supported providers
Online meeting creation	Oracle Learning creates sessions and syncs changes with the provider	All
Registration	Oracle Learning adds learners to and removes them from meeting	All
Attendance	Provider sends attendance details to Oracle Learning	All
Attendance processing	Provider sends attendance updates to Oracle Learning	All
Session recording	Provider sends the recorded session to Oracle Learning	Adobe and Zoom

Seamless experience for all

- Learners can enroll in and withdraw from instructor-led learning on the details page. They can also watch recordings from the details page.
- Instructors and learners can join online meetings directly from Oracle Learning details pages.
- Learning specialists can create, update, or remove online activities.
- Learners can join online meetings a specified number of minutes before the scheduled time. The default is 15 minutes, but can be changed in the ORA_WLF_LEARN_ILT_ALLOW_JOIN_CONFERENCE_MINUTES_PRIOR profile option.
- Learners who attended the session for the minimum required time will automatically have their learning marked as completed when the activity allows it.
- Instructors and learning specialists can access attendance reports and recordings (when supported) in the activity Related Materials section after the session ends.

Calendar invitations are managed automatically:

- Invites are sent when activities are scheduled. If a session has multiple instructors, all added instructors get the join meeting URL.

- Invites are sent to learners when they enroll in or are assigned instructor-led learning. Updated invites are sent when activity details change.
- When an activity is removed, invites are also automatically deleted for affected learners and instructors.

Available features available might vary depending on which virtual classroom provider you use.

2 Microsoft Outlook Calendar and Teams

Integrate Microsoft Outlook Calendar and Teams with Oracle Learning

Complete this one-time setup to sync calendar invitations, online meetings, attendance, and recordings between Microsoft services and Oracle Learning.

1. Microsoft Outlook Calendar and Microsoft Teams can share the same Microsoft Azure app. If you integrate both providers, configure the Azure app once with the combined permissions for Outlook Calendar and Microsoft Teams.

1. Verify that your organization is ready to integrate Microsoft Outlook Calendar, Microsoft Teams, or both with Oracle Learning.
   a. Confirm that your Oracle Learning and Development and Microsoft Office 365 subscriptions are active.
   b. Confirm that you can complete these actions:
      - Create a user in Microsoft 365 Admin Centre.
      - Register apps in the Microsoft Azure portal.
   c. Confirm that each instructor meets one of these account requirements:
      - Has an active Microsoft Teams licensed account associated with their Oracle Learning instructor resource (**My Client Groups** > **Learning and Development** > **Instructors**)
      - Has a primary email address in Oracle Fusion Cloud HCM that belongs to an active Microsoft Azure account
   d. Confirm that each instructor is an employee, contingent worker, or noncontingent worker in Oracle Global Human Resources.
   e. Confirm that each learner has an Oracle work email address that matches the Microsoft Azure email address they use to join the Microsoft Teams meetings.

2. In Microsoft Azure, prepare the tenant and application that Oracle Learning uses to connect to Microsoft Outlook Calendar, Microsoft Teams, or both.
    a. *Create a Microsoft tenant* if you don't already have a tenant. Make sure the tenant is a generic account, not a personal account. You'll need to provide these details:
        - **Tenant Type**: Azure Active Directory.
        - **Organization Name**: Enter the name of your organization.
        - **Initial Domain Name**: Enter a unique domain name for your tenant.
    b. *Register the app or web API in the tenant*. You'll need to provide these details:
        - **App Name**: Use a name you'll recognize, such as Oracle Learning Integration.
        - **Supported account types**: Select one that fits your organization. For details, consult Microsoft documentation.
        - **Redirect URL**: Leave this blank for now.

        Save the generated app client ID because you'll use it later when setting up access.
    c. *Add a client secret*. Save the client secret value because you'll use it later to complete the integration setup.
    d. *Grant the app permission to Microsoft Graph*. Don't use Delegated permissions:

Provider	Required permissoins
Microsoft Outlook Calendar	User.ReadBasic.All Calendars.ReadWrite
Microsoft Teams	User.ReadBasic.All OnlineMeetings.ReadWrite.All OnlineMeetingArtifact.Read.All

    e. *Grant admin consent* to the configured app permissions.
    f. For security, limit access to just one dedicated user--they'll be the organizer for all events from Oracle Learning.
        i. Create a *shared mailbox* (user) just for the Oracle Learning integration, such as Learning Coordinator. Make sure the user account is generic and not personal.
        ii. Restrict the app's mailbox access by creating an appAccessPolicy and assigning it to the new usere. For details, see *Limiting app permissions to specific Exchange Online mailboxes*.
        iii. In Oracle Learning, configure this user as the default organizer for all Microsoft Outlook meeting invites.
    g. *Configure app access to Microsoft Teams online meetings* by using the dedicated integration user. You'll need to provide the application client ID generated when you registered the app. You'll also need to provide the user (object) ID, from the *Azure user management portal*, for the dedicated user you'll use later to complete the integration configuration. This user will be the organizer of all Microsoft Teams meetings created through the integration.
        i. Run Windows PowerShell ISE as an administrator.
        ii. Run Connect-MicrosoftTeams to launch the Microsoft sign in page. Sign in using the dedicated integration user's account.

iii. Get application access policy information for the logged in integration user. The output should return the policy details.

For help with this step, see these Microsoft topics:

- *New-CsApplicationAccessPolicy*
- *Grant-CsApplicationAccessPolicy*
- *Get-CsApplicationAccessPolicy*

3. To send and sync calendar invites, configure the Microsoft Outlook Calendar provider.
   a. Go to **My Client Groups** > **Learning and Development** > **Configure External Providers**.
   b. Configure the Microsoft Outlook Calendar provider.

Field	Description
Status	When active, these delivered event alerts aren't sent. - WLF-00002: Offering Definition has Changed - WLF-00009 Learning Cloud Instructor Booking Event Removal - WLF-00008 Offering Activity Definition has Changed for an Instructor When you change status from Active to Inactive, Oracle Learning stops syncing updates for calendar events that were already sent.
Secret Tenant ID Client ID	Use the Organization ID, app client ID, and client secret from Microsoft Azure. Use the Organization ID as the Tenant ID.
Organizer Email Address for All Calendar Meeting Invites	For the Administrator user name, use the dedicated integration user name, typically in the format `<username>@<tenant>.onmicrosoft.com`. Oracle Learning uses this account as the organizer for calendar events and to send invites to learners. Make sure the account belongs to the same tenant ID that you're configuring. Because people get invites from this user, give it a meaningful name, such as Learning Coordinator or Learning Department. We strongly recommend not updating the default organizer value, especially in production. If the new coordinator user account doesn't have access to the mailbox of the previous coordinator account, any updates to events created by the previous coordinator account won't be propagated to learner calendars.

   c. Validate the configuration.
   d. Save your changes and close the page.

4. To create and synchronize online meetings, attendance, and recordings, configure the Microsoft Teams provider.
    a. Go to **My Client Groups** > **Learning and Development** > **Configure External Providers**.
    b. Configure the Microsoft Teams provider.

Field	Description
Account name	Display name for the Microsoft Teams provider in Oracle Learning lists, such as on the Create Instructor Provider Account page.
Status	When active, Microsoft Teams is available to instructors and for virtual instructor-led (VILT) activities. When you change the status from Active to Inactive, remove Microsoft Teams from any VILT offerings that currently use it.
Secret Tenant ID Client ID	Use the Organization ID, app client ID, and client secret from Microsoft Azure. Use the Organization ID as the Tenant ID.
Administrator user name	Use the dedicated integration user that you configured in Microsoft Azure, typically in the format `<username>@<tenant>.onmicrosoft.com`. Oracle Learning uses this account as the organizer for online meetings. Make sure the account belongs to the same tenant that you're configuring.

    c. Validate the configuration.
    d. Save your changes and close the page.
5. To automatically mark attendance as completed, enable and configure the virtual instructor-led (VILT) completion rules.
    a. Go to **My Client Groups** > **Learning and Development** > **Configure Catalog Defaults**.
    b. Optionally allow learning specialists to override these defaults when they create or edit offering pages.
    c. Enter the minimum percentage of the virtual activity that learners need to attend for the activity to be marked complete.

6. Add instructors and link them to Microsoft Teams.
    a. Go to **My Client Groups** > **Learning and Development** > **Instructors**.
    b. Add an instructor. You can search for a person by entering a partial or complete person name or number, department, job, or business unit to get a filtered list or a single person.
    c. Edit the instructor resource to link the instructor to Microsoft Teams.
        i. On the Instructors page, search for and select the instructor you just added.
        ii. In the Virtual Accounts section, select **Create** > **Microsoft Teams**.
        iii. On the Create Instructor Provider Account page, complete the relevant account details. The user name that you enter needs to exist as an active User Principal Name (UPN) in Microsoft Active Directory.
        iv. Validate the account details. The Product Templates section appears. But Oracle Learning doesn't use templates, so select Default.
        v. Save your changes and close the page.
        vi. On the Edit Instructor page, save your changes and close the page.
    d. Repeat these steps until you've linked all the appropriate instructors to Microsoft Teams.

       Available instructor features depend on Microsoft Team.

7. Schedule the Sync Instructor-Led Training for Learning process to sync session details and assigned learners. Microsoft Outlook events and ICS files include meeting links only after this sync process runs.
    a. Go to **Tools** > **Scheduled Processes**.

   Reference: *Scheduled background processes for Oracle Learning*

   When testing the integration in a nonproduction environment, we suggest that you test the integration using a set of test learner accounts with mailboxes you can access to avoid spamming real learners.

   Integration is one direction. Learner actions, such as accepting or declining an event, or proposing a new time aren't sent to the organizer or Oracle Learning.

8. To personalize learner and instructor calendar invites, configure calendar event templates.
    a. Go to **Setup and Maintenance** > **Tasks panel** > **Search** > **Manage Administrator Profile Values**.
    b. Set the site-level profile value to **Yes** for the ORA_WLF_CUSTOMIZE_CALENDAR_TEMPLATES profile option.
    c. Go to **My Client Groups** > **Learning and Development** > **Configure Calendar Event Templates**.
    d. Edit the learner and instructor templates as needed. You can configure separate plain text and rich text versions.
        - Rich text templates are used for Microsoft Outlook calendar events and for ICS files imported into calendar apps that support rich text. Plain text templates are used for ICS files imported into calendar apps that don't support rich text, such as Apple Calendar.
        - Paste unformatted text into the rich text editor, and then apply formatting by using the editor tools. Pasting formatted text can cause unexpected formatting or compilation issues.
        - To format a token value, include the braces ({ }) in the formatting. For example, make {COURSE_TITLE} bold instead of formatting only COURSE_TITLE.
        - To edit translated versions of the learner or instructor templates, use Translate on the corresponding tab.

    Template changes affect new calendar events. To apply updated templates to existing calendar events and downloaded ICS files, update the parent activities after changing the templates.

    Use these dynamic tokens to personalize the calendar content.

Available dynamic tokens	Description
{FIRST_NAME} {LAST_NAME} {DISPLAY_NAME}	Name of the recipient Use only in learner templates because learning specialists can download calendar invites using the Add to Calendar link from the Offerings page
{COURSE_TITLE}	Course title
{OFFERING_TITLE}	Offering title
{ACTIVITY_TITLE}	Activity title
{ACTIVITY_DESCRIPTION}	Activity description
{VILT_JOIN_LINK}	URL used to join the virtual activity or event
{ACTIVITY_LOCATION}	List of all activity locations and their addresses, including the link to any virtual session
{ACTIVITY_INSTRUCTORS_NAME_ONLY}	List of instructors showing only their display names
{ACTIVITY_INSTRUCTORS_NAME_EMAIL}	List of instructors showing only their display names and primary email addresses
{ACTIVITY_INSTRUCTORS_NAME_EMAIL_PHONE}	List of instructors showing their display names, primary email addresses, and phone numbers

Available dynamic tokens	Description
{OFFERING_COORDINATOR_NAME}	Display name of the offering coordinator
{OFFERING_COORDINATOR_EMAIL}	Primary email address for the offering coordinator
{OFFERING_COORDINATOR_PHONE}	Primary phone number for the offering coordinator
{COURSE_ENROLLMENT_DEEP_ LINK}	Link to the recipient's course enrollment page with Course Enrollment as the link text Use only in learner templates
{COURSE_TITLE_ENROLLMENT_ DEEP_LINK}	Link to the recipient's course enrollment page with the course Use only in learner templates title as the link text
{COURSE_DETAILS_ADMIN_DEEP_ LINK}	Link to the administration course details page with Course Details as the link text Use only in instructor templates and only when instructors have access to the administrator course details page
{COURSE_TITLE_DETAILS_ADMIN_ DEEP_LINK}	Link to the administration course details page with the course title as the link text Use only in instructor templates and only when instructors have access to the administrator course details page

How Microsoft Teams and Oracle Learning share data

Oracle Learning exchanges information with Microsoft Teams to create and manage online meetings, synchronize attendees, and retrieve attendance reports and available recordings.

Microsoft Graph API endpoint: *https://docs.microsoft.com/en-us/graph/api/overview?view=graph-rest-1.0*

Oracle Learning always sends Microsoft Teams these details:

- Tenant ID
- Client ID
- Client Secret
- Administrator primary email address

Depending on the learning action, Oracle Learning also sends this information:

Learning action	Other details also sent to Microsoft Teams
Validate an instructor	Instructor primary email address
Create or update a virtual classroom activity	Instructor primary email address Activity title, description, date, and time Meeting ID
Delete a virtual classroom activity	Meeting ID
Enroll in or get assigned to a virtual classroom activity Withdraw or remove a learner from a virtual classroom activity	Meeting ID Attendee primary email address
Retrieve attendance reports and available recordings (Handled by the scheduled Sync Instructor-Led Training for Learning background process)	Meeting ID

Use Microsoft Teams with Oracle Learning

Create, update, and join Microsoft Teams meetings for learning event and instructor-led offering activities. After meetings end, Oracle Learning syncs attendance and available recordings. When automatic completion is enabled, learner assignments are marked Completed based on configured attendance requirements.

1. Create Microsoft Teams meetings by configuring activities for learning events, instructor-led offerings, or blended offerings.
    a. Go to **My Client Groups** > **Learning and Development** > **Learning Catalog**.
    b. Create the learning event or offering, add at least 1 activity, and activate the learning. For details, see *Create learning for your Oracle Learning catalog*.
        - For events, set Online Meeting to Instructor Account and select the appropriate account for the Microsoft Teams provider. To automate completions, enable automatic completion and configure the online meeting options.

          If you enable breakout rooms, Oracle Learning disables attendance tracking and automatic completion. Use the attendance log to manually process learner attendance after the meeting.
        - For offerings, set Virtual Classroom Type to Named virtual classroom and select the appropriate virtual classroom for the Microsoft Teams provider.

    Invites are sent to instructors when activities are scheduled. If a session has multiple instructors, all the added instructors get the join meeting URL.

    When an activity is removed, invites are also automatically deleted for affected learners and instructors.

2. Join the Microsoft Teams meeting. How many minutes before the meeting starts instructors and learners can join depends on the ORA_WLF_LEARN_ILT_ALLOW_JOIN_CONFERENCE_MINUTES_PRIOR profile option.
    - Instructors can join using the link in their alert or calendar invite, or from the self-paced learning or activity details page. Instructors need to use the supported Microsoft Teams client for Windows or macOS to create and manage breakout rooms.
    - Enrolled learners can join using the link in their alert or calendar invite or from their enrollment details page.
3. Review attendance and available recordings after the meeting ends. Attendance reports and available recordings appear in the Related Materials section of the activity after the next Sync Instructor-Led Training for Learning process runs.

   When automatic completion is enabled, Oracle Learning calculates attendance using learner duration and meeting duration.

    - **Meeting duration** is the time from the activity start date and time until the specified meeting end.
    - **Learner duration** is the time from the later of the activity start date and time or the learner's join time until the earlier of the learner's leave time or the specified meeting end.
    - **Attendance percentage** is `Learner duration ÷ Meeting duration × 100.`

   For Microsoft Teams event activities, you can configure the meeting end that's used to calculate attendance. For all other supported virtual classroom activities, the meeting ends when the instructor leaves or closes the meeting.

   If learners disconnect and rejoin the meeting, Oracle Learning adds the attendance time from each connection when calculating attendance.

   For example, an activity is schedule from 1:00p to 3:00p and the instructor starts it at 12:45p and ends it at 3:05p.

Learner	Joins	Leaves	Attendance duration	Attendance %
1	12:55p	2:45p	1h 45m	84
2	1:05p	2:45p	1h 50m	88
3	1p	3:05p	2h 5m	100

   If the minimum required attendance is 80%, all three learners would have their learning assignments automatically marked Completed. If the minimum requirement is 85%, only learners 2 and 3 would have their assignments automatically marked Completed.

   When activities can't automatically be marked Completed

    - Enrolled learners who meet the automatic completion requirements don't join the meeting using the same work email address that's used in Oracle Global Human Resources and Microsoft Azure.
    - Enrolled learners who don't join or meet the minimum attendance requirement get the status specified for the event activity.
    - Attendees who aren't enrolled but meet the completion requirements won't get credit because they don't have an activity that can be marked Completed.

Troubleshoot integration issues between Microsoft Teams and Oracle Learning

Here's how you can fix possible configuration, meeting creation, automatic completion, and recording retrieval issues.

Issue	Possible causes	How to fix
Error while saving the Microsoft Teams or Microsoft Outlook provider configuration.	Invalid client credentials. Invalid integration user. Expired client secret.	Confirm that the Client ID and Client Secret are from an active Microsoft Azure app in the specified tenant ID. Verify that the Client Secret isn't expired. Confirm the user is active and licensed in Microsoft 365 Admin Center. Check that the user name belongs to the specified tenant ID.
Meeting join links aren't generated	Microsoft Teams meeting couldn't be created	Confirm that all required permissions are added to the Azure app and admin consent is granted. Confirm that app permissions uses Application scope. Grant the Application Access policy to the integration user. Confirm the integration user's license allows use of Microsoft Graph APIs.
Learner assignments aren't automatically marked Completed.	Automatic completion isn't enabled. Learner didn't meet the minimum attendance requirement. Email addresses don't match. Primary instructor didn't remain until the meeting ended.	Verify that the learning has the completion rule is enabled. For offering activities, enable the rule at the offering level. Confirm that the primary instructor's work email matches their Microsoft Azure email. Confirm that the primary instructor attended the full meeting and ended the Microsoft Teams session after it concluded. Confirm that the learner's work email matches their Microsoft Azure email.
Meeting recording isn't available	Recording isn't available yet from provider. Scheduled process hasn't run yet. Provider doesn't support automatic retrieval.	Wait for the provider to generate the recording. Wait for the next Sync Instructor-Led Training for Learning process. Verify that recording retrieval is supported.

3 Zoom

Integrate Zoom with Oracle Learning

Create and manage Zoom meetings for instructor-led learning. Oracle Learning automatically synchronizes meeting details, learner registrations, attendance, and available recordings between the two applications.

1. After you configure the integration, instructors and learners can join Zoom meetings directly from Oracle Learning. Learning specialists can use attendance details to automate learner completion when configured, and learners can access available meeting recordings from the related learning activity.

1. Configure Zoom for the integration.
   a. Confirm that the Zoom account has the administrator system role. This role lets you manage and install apps from Zoom Marketplace, which is required to install the Oracle Learning app. For details, see *Using Role Management* on Zoom support.

      The Zoom account also needs these permissions:

      - View Meetings (Dashboard)
      - View and Edit Users (User And Permissions Management)

      Hosts and attendees don't need any special permissions.
   b. Confirm that Zoom users have permission to install Zoom Marketplace apps for your organization. For details, see *Allowing specific users or user groups to install an app* on Zoom support.
   c. Install the Oracle Learning app from Zoom Marketplace and grant the requested permissions.

> **CAUTION:** Use a separate Zoom account for each Oracle Learning environment, like development, staging, and production. If you use the same Zoom account in multiple environments, the integration can fail.

2. In Oracle Learning, configure the Zoom provider.
   a. Go to **My Client Groups** > **Learning and Development** > **Configure External Providers**.
   b. Configure the Zoom provider using the Zoom account from step 1.

Field	Description
Account Name	Display name for the Zoom provider in Oracle Learning lists, such as on the Create Instructor Provider Account page. This name doesn't need to match the Zoom account used for the integration. For easy reference, consider including the email address used to sign in to the Zoom account in either the account name or the description.
Status	When you change the status from Active to Inactive, you also need to remove the provider from any VILT offerings that currently use it.
Let Zoom notify learners about their registrations, withdrawals, and meeting updates	Enabled by default. Changing the setting applies to only future Zoom meetings. Existing meetings ignore the change.

Field	Description
	If you're already generating notifications directly from Oracle Learning, disabling the Zoom notifications would avoid learners potentially getting duplicate enrollment, withdrawal, and activity change notifications.

   c. Validate the configuration. When prompted, sign in using the Zoom administrator account you configured in step 1.
   d. Save your changes and close the page.
3. Add instructors and link them to Zoom.
   a. Go to **My Client Groups** > **Learning and Development** > **Instructors**.
   b. Add an instructor. You can search for a person by entering a partial or complete person name or number, department, job, or business unit to get a filtered list or a single person.
   c. Edit the instructor resource to link the instructor to Zoom.
      i. In the Virtual Accounts section, select Create > Zoom.
      ii. Complete and validate the account details.
      iii. Save your changes.
   d. Repeat these steps for each instructor who will use Zoom.

   Available instructor features depends on Zoom.

4. Schedule the Sync Instructor-Led Training for Learning process to sync session details and assigned learners. Alerts and ICS files won't include meeting links until after the Sync Instructor-Led Training for Learning process runs.
   a. Go to **Tools** > **Scheduled Processes**.

   Reference: *Scheduled background processes for Oracle Learning*

How Zoom and Oracle Learning share data

Oracle Learning exchanges data with Zoom to establish the connection, create and manage virtual classroom meetings, synchronize learner registrations, track attendance, and retrieve available meeting recordings.

Learning Action	Sent to Zoom	Sent by Zoom
Configure and validate Zoom	Client ID	`Auth code`
Configure and validate Zoom and when the ESS job to run Bulk ingest to OSCS runs and calls Zoom APIs	`Auth code` Base64 encoded Client credentials	Stored in secure value • Access token • Refresh token
Validate an instructor's Zoom account, when linking a Zoom classroom	Instructor's Zoom user name, entered by the learning specialist	User information
Create a virtual classroom activity	Host's (primary instructor's) email address	Meeting details
Update and delete a virtual classroom activity	Zoom meeting ID	NA
Add attendee (learner) to Zoom meeting	Zoom meeting ID	NA

Learning Action	Sent to Zoom	Sent by Zoom
	Attendee email Attendee first name Attendee last name	
Get attendee join URL	Zoom meeting ID	Meeting join URL
Get host start URL	Zoom meeting ID	Meeting start URL
Remove attendee (learner) from Zoom meeting	Zoom meeting ID Attendee email	NA
Get past meetings for attendance	Zoom meeting IDs	List of meetings
Get attendance details after a meeting	Zoom meeting ID	Attendance details
Get recording after a meeting	Zoom meeting ID	Recording details

Use Zoom with Oracle Learning

Create, update, and join Zoom meetings for learning event and instructor-led offering activities. After meetings end, Oracle Learning syncs attendance and available recordings. When automatic completion is enabled, learner assignments are marked Completed based on configured attendance requirements.

1. Create Zoom meetings by configuring activities for learning events, instructor-led offerings, or blended offerings.
    a. Go to **My Client Groups** > **Learning and Development** > **Learning Catalog**.
    b. Create the learning event or offering, add at least 1 activity, and activate the learning. For details, see *Create learning for your Oracle Learning catalog*.
        - For events, set Online Meeting to Instructor Account and select the appropriate account for the Zoom provider. To automate completions, enable automatic completion and configure the online meeting options.
        - For offerings, set Virtual Classroom Type to Named virtual classroom and select the appropriate virtual classroom for the Zoom provider.

    When an activity is removed, invites are also automatically deleted for affected learners and instructors.
2. Join the Zoom meeting. How many minutes before the meeting starts instructors and learners can join depends on the ORA_WLF_LEARN_ILT_ALLOW_JOIN_CONFERENCE_MINUTES_PRIOR profile option.
    - Instructors can join using the link in their alert or calendar invite, or from the activity details page.
    - Enrolled learners can join using the link in their alert or calendar invite or the Join button on their enrollment details page.

3. Review attendance and available recordings after the meeting ends. Attendance reports and available recordings appear in the Related Materials section of the activity after the next Sync Instructor-Led Training for Learning process runs.

   When automatic completion is enabled, Oracle Learning calculates attendance using learner duration and meeting duration.

   - **Meeting duration** is the time from the activity start date and time until the specified meeting end.
   - **Learner duration** is the time from the later of the activity start date and time or the learner's join time until the earlier of the learner's leave time or the specified meeting end.
   - **Attendance percentage** is `Learner duration ÷ Meeting duration × 100.`

   The meeting ends when the primary instructor leaves or closes the meeting. If learners disconnect and rejoin the meeting, Oracle Learning adds the attendance time from each connection when calculating attendance.

   For example, an activity is scheduled from 1:00p to 3:00p and the instructor starts it at 12:45p and ends it at 3:05p.

Learner	Joins	Leaves	Attendance duration	Attendance %
1	12:55p	2:45p	1h 45m	84
2	1:05p	2:45p	1h 50m	88
3	1p	3:05p	2h 5m	100

   If the minimum required attendance is 80%, all three learners would have their learning assignments automatically marked Completed. If the minimum requirement is 85%, only learners 2 and 3 would have their assignments automatically marked Completed.

   When activities can't automatically be marked Completed

   - When enrolled learners who meet the automatic completion requirements don’t join the meeting using the same work email address that's used in Oracle Global Human Resources and Zoom.
   - For learning event activities, when enrolled learners don't join or didn't meet the minimum attendance requirement, the activity status configured for the event applies instead. These status settings don't apply to offering activities.
   - When attendees who aren't enrolled meet the completion requirements because they don't have an activity that can be marked Completed.

4 Adobe Connect

Set Up Adobe Connect Integration with Oracle Learning

Create and manage Adobe Connect sessions for instructor-led learning. Oracle Learning syncs session details and assigned learners between the two applications.

1. Prepare to integrate Adobe Connect by getting these details from your Adobe Connect administrator:
    - Provider URL
    - User Name
    - Password
2. Configure the Adobe Connect virtual classroom provider.
    a. Go to **My Client Groups** > **Learning and Development** > **Configure External Providers**.
    b. Configure the Adobe Connect provider using the details obtained in step 1.

Field	Description
Account Name	Name seen in Oracle Learning lists, like on the Create Instructor Provider Account page.
Status	Set to **Active** to make available for instructors and virtual instructor-led (VILT) activities. When you change the status to **Inactive**, remove Adobe Connect from any VILT activities that currently use it.
Provider URL	Provided by Adobe Connect Administrator Provided by the Adobe Connect administrator. Enter either the fully qualified URL (for example, `http://oraclecorp.adobeconnect.com or http://oraclecorp.adobeconnect.com`) or a shorthand label (for example, oraclecorp)
User Name Password	Provided by Adobe Connect administrator

    c. Validate the configuration.
    d. Save your changes and close the page.
3. Add instructors and link them to Adobe Connect.
    a. Go to **My Client Groups** > **Learning and Development** > **Instructors**.
    b. Add an instructor. You can search for a person by entering a partial or complete person name or number, department, job, or business unit to get a filtered list or a single person.
    c. Edit the instructor resource to link the instructor to Adobe Connect.
        i. In the Virtual Accounts section, select Create > Adobe Connect.

ii. Complete and validate the account details.

Save your changes.

d. Repeat these steps for each instructor who will use Adobe Connect.

Available instructor features depend on Adobe Connect.

4. Schedule the Sync Instructor-Led Training for Learning process to sync session details and assigned learners. Alerts and ICS files won't include meeting links until after the Sync Instructor-Led Training for Learning process runs.
    a. Go to **Tools** > **Scheduled Processes**.

    Reference: *Scheduled background processes for Oracle Learning*

How Adobe Connect and Oracle Learning share data

Oracle Learning exchanges data with Adobe Connect to establish the connection, create and manage virtual classroom meetings, synchronize learner registrations, retrieve attendance information, and retrieve available meeting recordings.e

Oracle Learning connects to Adobe Connect web services. For details, see `https://helpx.adobe.com/adobe-connect/webservices/getting-started-connect-web-services.html` .

Learning action	Sent to Adobe Connect
Configure and validate external provider Validate an instructor	Delegate user name and password defined in provider setup
Create or update a virtual classroom activity	Delegate user name and password defined during provider setup Instructor user name Activity title, description, date, and time Meeting ID
Delete a virtual classroom activity Enroll in or assign a learner to a virtual classroom activity Withdraw or remove a learner from a virtual classroom activity Retrieve meeting recordings Retrieve attendance information (Retrievals are handled by the scheduled Sync Instructor-Led Training for Learning background process)	Delegate user name and password defined in provider setup Meeting ID

Use Adobe Connect with Oracle Learning

Create, update, and join Adobe Connect meetings for learning event and instructor-led offering activities. After meetings end, Oracle Learning syncs attendance and available recordings. When automatic completion is enabled, learner assignments are marked Completed based on configured attendance requirements.

1. Create Adobe Connect meetings by configuring activities for learning events, instructor-led offerings, or blended offerings.
    a. Go to **My Client Groups** > **Learning and Development** > **Learning Catalog**.
    b. Create the learning event or offering, add at least 1 activity, and activate the learning. For details, see *Create learning for your Oracle Learning catalog*.
        - For events, set Online Meeting to Instructor Account and select the appropriate account for the Adobe Connect provider. To automate completions, enable automatic completion and configure the online meeting options.
        - For offerings, set Virtual Classroom Type to Named virtual classroom and select the appropriate virtual classroom for the Adobe Connect provider.

    When an activity is removed, invites are also automatically deleted for affected learners and instructors.
2. Join the Adobe Connect meeting. How many minutes before the meeting starts instructors and learners can join depends on the ORA_WLF_LEARN_ILT_ALLOW_JOIN_CONFERENCE_MINUTES_PRIOR profile option.
    - Instructors can join using the link in their alert or calendar invite, or from the activity details page.
    - Enrolled learners can join using the link in their alert or calendar invite or the Join button on their enrollment details page.
3. Review attendance and available recordings after the meeting ends. Attendance reports and available recordings appear in the Related Materials section of the activity after the next Sync Instructor-Led Training for Learning process runs.

    When automatic completion is enabled, Oracle Learning calculates attendance using learner duration and meeting duration.
    - **Meeting duration** is the time from the activity start date and time until the specified meeting end.
    - **Learner duration** is the time from the later of the activity start date and time or the learner's join time until the earlier of the learner's leave time or the specified meeting end.
    - **Attendance percentage** is `Learner duration ÷ Meeting duration × 100`.

    The meeting ends when the primary instructor leaves or closes the meeting. If learners disconnect and rejoin the meeting, Oracle Learning adds the attendance time from each connection when calculating attendance.

    For example, an activity is scheduled from 1:00p to 3:00p and the instructor starts it at 12:45p and ends it at 3:05p.

Learner	Joins	Leaves	Attendance duration	Attendance %
1	12:55p	2:45p	1h 45m	84
2	1:05p	2:45p	1h 50m	88

Learner	Joins	Leaves	Attendance duration	Attendance %
3	1p	3:05p	2h 5m	100

If the minimum required attendance is 80%, all three learners would have their learning assignments automatically marked Completed. If the minimum requirement is 85%, only learners 2 and 3 would have their assignments automatically marked Completed.

When activities can't automatically be marked Completed

- When enrolled learners who meet the automatic completion requirements don’t join the meeting using the same work email address that's used in Oracle Global Human Resources and Adobe Connect.
- For learning event activities, when enrolled learners don't join or didn't meet the minimum attendance requirement, the activity status configured for the event applies instead. These status settings don't apply to offering activities.
- When attendees who aren't enrolled meet the completion requirements because they don't have an activity that can be marked Completed.