Understanding Alerts in Oracle Learning Cloud

JULY 2020



TABLE OF CONTENTS

Un	nderstanding Alerts Overview	5
Pre	erequisite Documentation	5
Ev	vent Alerts	5
	Enabling Alerts in Learning Cloud	5
	Process Learning Alerts Scheduled Job	6
	Learning Cloud Alerts	7
	Event Alerts Configuration Overview	7
	Available Learning Cloud Alerts	7
Re	esource Alerts based on REST	8
	LearnerLearningRecords REST API	8
	Building an Oracle Learning Cloud Resource Alert	9
	Creating a Basic Oracle Learning Cloud Learner Learning Records Resource Alert	9
	Attachments & Links	.13
	Learner Learning Records Resource Alert Configuration Details	.14
W	orking Examples	20
Ge	eneral Considerations	40
Tro	oubleshooting Alerts	41
	WLF-00004 Special Case	.41
	Event alert troubleshooting	.41

	Resource alert troubleshooting	42
	3	
Fre	equently Asked Questions	46

Note: In the images or examples included in this document regarding: user details, company names, addresses, emails, and/or telephone numbers represent a fictitious sample of data (based upon made up data used in a demo environment). Any similarity to actual persons, living or dead, is purely coincidental and not intended in any manner.

UNDERSTANDING ALERTS OVERVIEW

Oracle Learning Cloud uses the Alerts Composer tool within HCM to send informational notifications to users by email and worklist. Notifications are triggered based on conditions for two types of alerts.

- Event Alerts: They're triggered when a specific event occurs in the application.
- Resource Alerts: They are based on Oracle HCM Cloud REST API resources.
- This white paper is updated on release 20C

PREREQUISITE DOCUMENTATION

It is recommended that you read the following documents, located on the Oracle Help Center.

- LearnerLearningRecords REST API Documentation
- Alerts Composer User Documentation

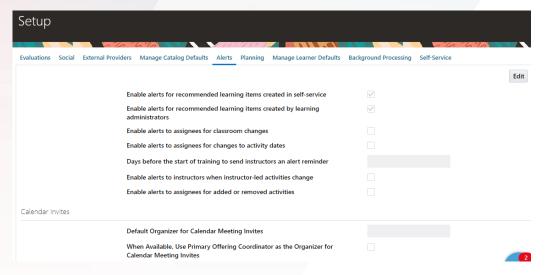
EVENT ALERTS

Event alerts are based on the context provided by the calling client. They're triggered when a specific event occurs in the application. Event alerts are preconfigured in Oracle Learning Cloud. The event that triggers the alert is hardcoded in the system, but the recipients notification body templates can be customized in the alert settings.

Enabling Alerts in Learning Cloud

Once you have set up the alert templates in the Alerts Composer, enable the alerts you want to use in Learning Cloud.

- 1. In the My Client Group area, click Learning.
- 2. Click Setup.
- 3. Click Manage Alerts.
- 4. Click Edit.
- 5. Select the following check boxes to enable them.



- Enable alerts for recommended learning items created in self-service. When enabled, if a
 recommendation is created by the learner, the Learning Recommended to Learner alert is sent to
 the recipients defined in the alert.
- Enable alerts for recommended learning items created by the learning administrators. When enabled, if a recommendation is created by an administrator, the Learning Recommended to Learner alert is sent to the recipients defined in the alert.
- Enable alerts to assignees for classroom changes. When enabled, if an Administrator updates an
 instructor-led activity classroom, the Offering Definition has Changed alert is sent to the recipients
 defined in the alert.
- Enable alerts to assignees for changes to activity dates. When enabled, if an Administrator updates an instructor-led activity date or time, the Offering Definition has Changed alert is sent to the recipients defined in the alert.
- Enable alerts to instructors when instructor led activities change. When enabled, if an Administrator updates an instructor-led activity, the Offering Activity Definition has changed for an Instructor alert is sent to the recipient defined in the alert.
 - 6. In the Days before the start of training to send instructors an alert reminder field, enter the number of days prior to the training start date to send the Upcoming ILT Activity to Instructors Reminder alert. When a value is entered in this field the alert is enabled. If you leave this field empty, the alert is disabled. If you enter 0, the alert is sent on the day of the activity.
 - 7. Click Save and Close.

Process Learning Alerts Scheduled Job

To ensure alerts are being processed, you can view the results of the Process Learning Alerts job in the from the Scheduled Processes work area. Oracle recommends that you set up this job to run at least twice daily.

Refer to the following two documents on docs.oracle.com for additional information:

 The Alerts Composer chapter of the guide called "Oracle Global Human Resources Cloud Implementing Global Human Resources" The Processes in Oracle Learning Cloud chapter of the guide called "Oracle Talent Management Cloud Implementing Learning"

Learning Cloud Alerts

You can send informational alert notifications to Learning Cloud users to notify them of specific learning events, such as upcoming activity reminders, or changes to offerings. Configure Learning Cloud alerts in the Alerts Composer tool, and enable the ones you want to use in the Learning Cloud setup.

Notifications are triggered based on predefined conditions for two types of alerts:

- Event Alerts: Event Alerts are based on the context provided by the calling client. They're
 triggered when a specific event occurs in the application. You can't modify the triggering criteria for
 notifications. For example, you can notify a learner when an offering that they are assigned to has
 changed.
- Resource Alerts: Resource Alerts are based on Oracle Cloud REST API resources. The
 resources must be deployed in the environment. You can modify the triggering criteria for
 notifications by defining filters on the resource attributes if you have the required privileges to
 access the REST resources. The REST endpoints are delivered by Oracle, and you build the
 alerts. For example, you can send out alerts to all the learners that have required learning within
 the last 24-hour period. For additional information on configuring these types of alerts, refer to the
 document called Configuring Resource Alerts Based on REST in Oracle Learning Cloud (Doc ID
 2543297.1), support.oracle.com.

Event Alerts Configuration Overview

The following are the high-level steps you need to follow to enable alerts and make them available to users in Learning Cloud.

- 1. Create the alert templates in the Alerts Composer.
- 2. Enable the alerts you want to use in Learning Cloud.
- 3. Schedule the Process Learning Alerts Job.

Available Learning Cloud Alerts

You can search for Learning Cloud alerts by Alert Name or Alert Code. All learning notifications start with "WLF". For example, WLF-00001 is the Learning Recommended to Learner alert.

Table 1. Oracle Learning Cloud Alerts

ALERT NAME	ALERT CODE	DESCRIPTION
Learn Custom Alert	WLF-00003	This is a custom-defined alert that is initiated by an Administ when viewing assignments. You can configure this alert to b an action from the Manage Learners area. When users click Alert Action, they can select the template they want to use to alert to learners. The alert templates include message text, to recipient, and the communication method (email or worklist)
Learning Cloud Instructor Booking Event Removal	WLF-00009	Alerts instructors when an Administrator removes one of the instructor-led activities.
Learning Payment Successfully Processed	WLF-00007	Indicates payment for a learning item was successfully processing

Learning Recommended to Learner	WLF-00001	Notifies learners that a learning item was recommended to them.
Offering Activity Definition has Changed for an Instructor	WLF-00008	Alerts an instructor when an Administrator has changed the details to an instructor-led activity.
Offering Definition has Changed	WLF-00002	Alerts learners when an Administrator changes the details to an instructor-led activity.
Pay for Learning Item	WLF-00006	Sends a message to the assignment creator to request that they pay for an offering.
Upcoming ILT Activity to Instructors Reminder 1	WLF-00004	Reminds learning instructors when the start date to one of their upcoming instructor led activities is approaching.

RESOURCE ALERTS BASED ON REST

Resource alerts let you configure when and how alerts are sent to users based on Oracle Learning Cloud resources. Unlike the pre-defined event alerts, you define events that trigger a resource alert. Resource alerts use the Oracle Learning Cloud REST endpoints in Fusion.

LearnerLearningRecords REST API

The learnerLearningRecords resource includes a collection of assignment records, or a single assignment record when queried with assignment record ID for a learner. This is a functional user REST resource and applies to a learner, and not a learning specialist. The assignment records are included for learning item types: Course, Specialization, Video and Tutorial. The assignment records include Voluntary and Required assignments, and not Recommended. This resource returns a JSON document with collections or individual learning records and filters can be applied. It contains the following top-level child resources: (Review the LearnerLearningRecords REST API Documentation for the detail levels under these top-level child resources.)

-/Completion Details
-/Completion Summary
-/Learning Outcomes
-/Learning prerequisites
-/Selected Course Offerings
-/LearningItemDFF

Sometimes the REST response data needs manipulation or transformation when creating an alert.

- Dates: "2019-02-23T23:16:05.410+00:00" = "23rd February"
- Lookup values: "ORA ASSN REC INPROGRESS" = "In Progress"
- Username: "100000008153818" = "john.smith"

 Recipient email address of the Learner's Manager = \${AlertUtils.empManager(learnerLearningRecords.assignedTold).WorkEmail}

Building an Oracle Learning Cloud Resource Alert

The following are the high-level steps you need to follow to create a resource alert. Within each step are questions to consider.

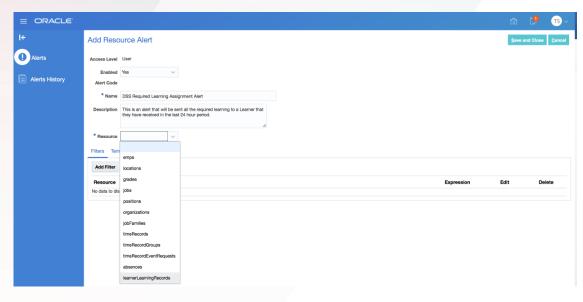
- 4. Create the alert.
- 5. Define the filter. Filters enable you to specify the triggering criteria for alert notifications. What data should be used in the alert? For example, "find me all of the required assignments that have occurred within the last 24 hour period." Does the data need any transformation to execute the filter? For example, are you using a date format that needs manipulation in the filter?
- 6. Define which recipients should receive the alert. Who should receive this alert and by what alert method? For example, "send the learner and the learner's manager a notification alert and an email alert when the learner has required learning within the last 24 hour period." Ensure that the recipient being used is following the correct string tokens.
- 7. Define the message. What is the message subject and body of the message? What are the tokens that are going to be used in the body of the message? For example, you would want to create a message that tells the *recipient* (the recipient's name would be a token in the message) that they have received a list of required *learning* (also a token in the message) in the last 24-hour period. When adding the token, you may also need to transform it to a correctly formatted value that looks good to the end user.
- 8. Run a simulation to test the alert

Creating a Basic Oracle Learning Cloud Learner Learning Records Resource Alert

Using the high level steps above, let's create a basic resource alert that can be sent to users that have required assignments that were assigned in the last 24 hours.

CREATE THE RESOURCE ALERT

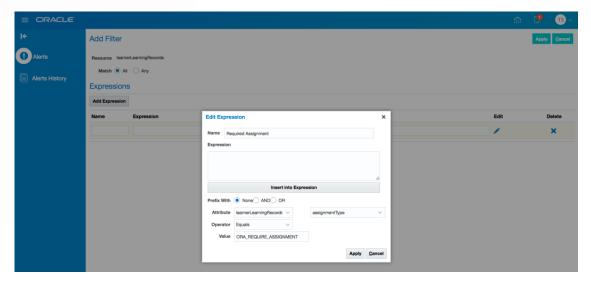
- 1. Click Navigator > Alerts Composer.
- 2. On the Alerts page, select Add > Resource Alert.
- 3. On the Add Resource Alert page, enter the name and description for the alert.
- 4. The character limit for name is 80 and description is 2000.
- 5. In the **Resource** field, select the REST resource for which you want to create the alert. Use learnerLearningRecords.



DEFINE THE FILTER

Create a filter for learning records with required assignments that were created in the last 24 hours. To define the filter:

- 1. On the Filters tab, click **Add Filter**.
- 2. On the Add Filter page, in the Resource field, select learnerLearningRecords resource
- 3. Click Add Expression to define filter expressions on specific attributes of the resource.



- 4. In the Edit Expression dialog box, select the parameters to build the filter expression.
- Enter a name for the expression.
- Use the Prefix With option to specify any prefix operators on the expression.
- In the Attribute field, select the resource name and the attribute that you want to specify the filter condition on.

- In the Operator field, select the logical operator.
- In the Value field, specify the value for the condition.
- Click Insert into Expression.
- Click Apply. The expression appears on the Add Filter page.
- Repeat steps 3 and 4 to add more filter expressions.
- Click Apply to return to the Add Resource Alert page.
- Repeat steps 1 to 4 to define more filters on the Resource alert.



In this example, notice that a filter has been created that includes required assignments that have occurred within the past 24 hour period.

Define Who Receives the Alert and How They Receive It

Send the alert to learners via an email message and via a worklist notification.

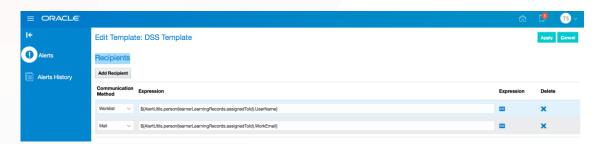
- 1. On the Add Resource Alert page, click the Templates tab and then click **Add Template**.
- 2. Enter a name for the template and select the default language. The character limit for template name is 80.

By default, the template is enabled.

- 3. Click Edit and select Manage Recipients and Message.
- 4. On the Edit Template page, click Add Recipient.
- 5. In the Communication Method column, select email or worklist from the list of values.
- 6. In the Expression field:
- 7. Add the expression for the email address or user name of the recipient.
- 8. Add comma-delimited expressions for email addresses or user names of multiple recipients.

or

- 9. Click the Expression icon to build the expression.
- 10. In the Edit Expression dialog box, follow one of these steps:
- 11. In the Literal field, enter the expression directly, for example, john.smith@oracle.com.
- Select the parameters to build the expression, for example, \${emps.WorkEmail}. See Alerts
 Composer Functions and Groovy Expressions: Explained for more examples.
- Click **Apply**. The expression appears on the Edit Template page.



In the above example, two recipient lists were created: One to send learner alerts to the worklist, and another to send alerts to the email address on learner person records.

CREATE A MESSAGE FOR THE RESOURCE ALERT

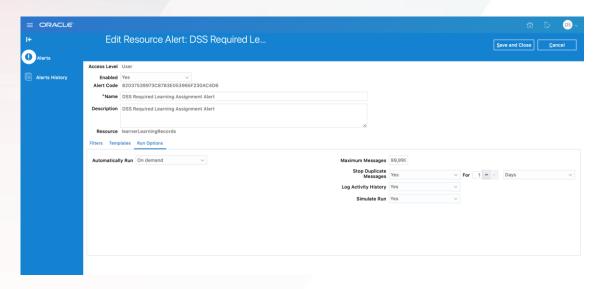
Indicate to learners in the message that they have required learning that has been assigned in the last 24 hours. To configure the message subject and body of the message:

- 1. In the Message section, set up the notification format.
- 2. Select the HTML or Text format for the message text.
- 3. Enter the message subject. You can also insert expressions in the subject using the **Expression** icon, which we will cover more below.
- 4. Use the rich text editor to format the message text. You can select options such as font, size, style, and so on.

Enter the message text. You can also include expressions in the text. For example: "Hello, World. You have Required Learning"

RUN A SIMULATION TO TEST THE ALERT

The alert can be run on-demand, or scheduled on the Run Options tab. For testing purposes, use the on-demand option and select **Yes** from the **Simulate Run** drop-down list.



This simulates how the alert is run, and how it appears to end users. You can see the results of the run in Alerts History. Once you are satisfied with how the message works and looks to end users, the next step is to run the alert in live mode. You can do this by selecting **No** from the **Simulate Run** drop-down list. You can then validate that learners that had required assignments in the last 24 hours received the email and worklist notification on the Alerts History page.

Attachments & Links

Attachments/related materials can be enclosed in a resource alert notification by mail. They can either be icalendar attachments or the attachments that are on offerings/activities.

For activity attachments we can use,

https://HOST/hcmRestApi/resources/latest/learnerLearningRecords?q=learningItemNumber='OLC1537 92'&expand=completionDetails.relatedMaterials

learningRecords/completionDetails/relatedMaterials.

For Calendar Links we have an addToCalenderLink though in the completionDetails.

https://HOST/hcmRestApi/resources/latest/learnerLearningRecords?q=learningItemNumber='OLC1537 92'&expand=completionDetails

```
"activityDisplayOrder": 1,
"activitySectionId": null,
"activitySectionNumber": null,
"activitySectionTitle": null,
"activitySectionDescription": null,
"activitySectionDisplayOrder": null,
"activitySecComplRequired": null,
"activitySectionTotalActivities": null,
"activitySectionAttemptStatus": null,
"activitySectionAttemptStatusMeaning": null,
"activitySectionAttemptCompletionProgress": null,
"activityPassingScore": null,
"activityExpectedEffort": null,
"activityEffortUnits": "ORA_DUR_HOUR",
"activityComplRequirement": "ORA_REQUIRED",
"activityLearnerMarkCompl": "N",
"activityDate": "2020-06-19",
"activityStartTime": "3:00 PM",
"activityEndTime": "6:00 PM",
"activityTimeZone": "America/Los_Angeles",
"virtualClassroomJoinLink": "https://oracle.com",
"virtualClassroomInformation": "https://oracle.com",
```

When the user clicks on this, they can down the ICS attachment.

Learner Learning Records Resource Alert Configuration Details

Now that you know how to configure a basic alert, let's go into the details of each of the alert configuration steps to discuss the details and show some more examples.

KEY LEARNERLEARNINGRECORD LOOKUPS

The table below defines lookup values that are used in the Learner Learning Record Resource. These are common attributes that could be used when building alert filters. The lookup values displayed in the table are the out of the box values, and may change over time. It is important to view the most up to date values that are in you pod by accessing the lookup values in your system.

"addToCalendarLink": "https://HOST/hcmUl/rest/v2/learn/activity/300100189347364",

Note: refer to the Lookup Values chapter of the Implementing Oracle Learning Cloud guide on docs.oracle.com for instructions on how to do this.

Table 2. LearnerLearningRecord Lookups

LOOKUP ATTRIBUTE	LOOKUP ITEMS
AssignedLearningItemTypeLOV	ORA_COURSE - Course ORA_CLASS - Class
"href": "https://hcym- test.fa.us2.oraclecloud.com:443/hcmRestApi/re	ORA_SPECIALIZATION - Specialization ORA LEGACY – Inactive Item
sources/11.13.18.05/learnerLearningRecords/{i d}/lov/AssignedLearningItemTypeLOV"	

ASSIGNMENT TYPE "https://hcym- test.fa.us2.oraclecloud.com:443/hcmRestApi/re sources/11.13.18.05/learnerLearningRecords/{i d}/lov/AssignmentTypeLOV"	ORA_RECOMMEND_ASSIGNMENT - Recommend Assignment. ORA_REQUIRE_ASSIGNMENT - Required Assignment ORA_JOIN_ASSIGNMENT - Voluntary Assignment or Self Joined Assignment
Learning Record Status "href": "https://hcym- test.fa.us2.oraclecloud.com:443/hcmRestApi/re sources/11.13.18.05/learnerLearningRecords/{i d}/lov/AssignmentStatusLOV"	ORA_ASSN_REC_COMPLETE ORA_ASSN_REC_ACTIVE ORA_ASSN_REC_WITHDRAWN ORA_ASSN_REC_CONTENT_COMPLETE ORA_ASSN_REC_PENDING_ACTIVE ORA_ASSN_REC_REQ_APPROVED ORA_ASSN_REC_REQ_REJECTED ORA_ASSN_REC_DELETED
Assigned to "href": "https://hcym- test.fa.us2.oraclecloud.com:443/hcmRestApi/re sources/11.13.18.05/learnerLearningRecords/{i d}/lov/AssignedToTypeLOV",	ORA_PERSON ORA_SPECIALIST
Assigner "href": "https://hcym- test.fa.us2.oraclecloud.com:443/hcmRestApi/re sources/11.13.18.05/learnerLearningRecords/{i d}/lov/AssignerToAttributionTypeLOV"	ORA_WLF_LEGAL – Legal attribution code on who made the assignment. ORA_WLF_CEO_OFFICE – CEO attribution code on who made the assignment. ORA_WLF_SECURITY – Security attribution code on who made the assignment.

FILTER EXAMPLES

The table below provides some additional common filter examples that you can use.

Table 3. Filter Example

• /	
FILTER EXAMPLE	DEFINITION
Current Assignments	
\${assignmentCreatedDate} >= sysdate-1	All assignments created in the last 24 hours
\${assignmentCreatedDate} >= sysdate-1 \${assignmentType} = 'ORA_REQUIRE_ASSIGNMENT'	All assignments created in the last 24 hours that are required assignments.
exists (SELECT 'x' from dual where \${assignmentCreatedDate} >= (select nvl(max(runs.run_end),sysdate-1) from hrc_alert_runs runs, hrc_alerts_b alerts where runs.alert_id = alerts.alert_id and alerts.alert_code = 'WLF-00010'))	All assignments since the last run of this alert OR since the last 24 hours (replace WLF-00010' with the relevant alert_code)
<pre>\${assignmentCreatedDate} <= sysdate \${assignmentStatus} = 'ORA_ASSN_REC_ACTIVE' \${assignmentStatus} = 'ORA_ASSN_REC_CONTENT_COMPLETE' \${assignmentType} = 'ORA_REQUIRE_ASSIGNMENT' \${assignmentType} = 'ORA_ASSN_REC_WITHDRAW_PENDING'</pre>	All open active status Required assignments
Assignments Completed	

\${assignmentCompleteDate} >= sysdate-7 \${assignmentStatus} = 'ORA_ASSN_REC_COMPLETE'	All assignments completed this week. Can create the alert to be run weekly.
Assignments Past Due	
<pre>\${assignmentDueDate} <= sysdate \${assignmentStatus} = 'ORA_ASSN_REC_ACTIVE' \${assignmentStatus} = 'ORA_ASSN_REC_CONTENT_COMPLETE' \${assignmentType} = 'ORA_ASSN_REC_WITHDRAW_PENDING'</pre>	All assignments past due.
<pre>\${assignmentDueDate} >= sysdate+7 \${learningItemType} = 'ORA_SPECIALIZATION' \${assignmentStatus} = 'ORA_ASSN_REC_ACTIVE' \${assignmentStatus} = 'ORA_ASSN_REC_CONTENT_COMPLETE' \${assignmentType} = 'ORA_ASSN_REC_WITHDRAW_PENDING'</pre>	All Specialization assignments past due for more than 1 week.
<pre>\${assignmentDueDate} >= sysdate \${assignmentDueDate} <= sysdate+1 \${assignmentStatus} = 'ORA_ASSN_REC_ACTIVE' \${assignmentStatus} = 'ORA_ASSN_REC_CONTENT_COMPLETE' \${assignmentType} = 'ORA_ASSN_REC_WITHDRAW_PENDING'</pre>	All assignments due in the next 24 hours (two expressions in one filter)
My Team(Note: Group by function will be needed)	
<pre>\${assignmentDueDate} >= sysdate+7 \${assignmentStatus} = 'ORA_ASSN_REC_ACTIVE' \${assignmentStatus} = 'ORA_ASSN_REC_CONTENT_COMPLETE' \${assignmentType} = 'ORA_ASSN_REC_WITHDRAW_PENDING'</pre>	All my teams assignments past due for more than 1 week.
\${assignmentStatus} = 'ORA_ASSN_REC_PENDING_ACTIVE'	All my teams' assignments that need approval.
\${assignmentStatus} = 'ORA_ASSN_REC_REQ_REJECTED'	All my teams' assignments that have been rejected.

RECIPIENT EXAMPLES

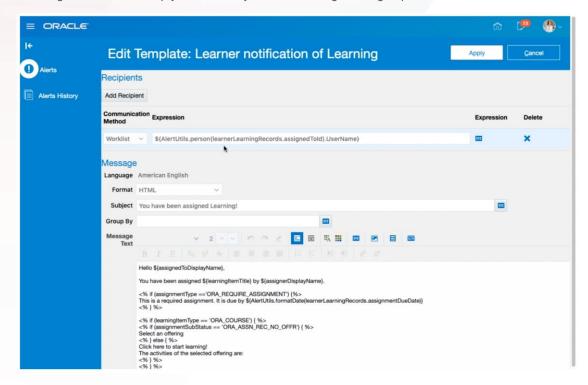
In this example, there are two recipient lists; one to send to learners (the alert to their worklist), and another to send to the email address on their person records.

Table 4. Recipient Examples

RECIPIENT EXAMPLES	DEFINITION
\${AlertUtils.person(learnerLearningRecords.assignedTold).UserName}	When you need employee's username (worklist) and only have a Person ID.
$\label{lem:learner} $$ AlertUtils.person(learnerLearningRecords.assignedTold). WorkEmail} $$$	When you need employee's Email and only have a Person ID.
\${AlertUtils.empManager(learnerLearningRecords.assignedTold).UserName}	When you need the Manager's Username.
\${AlertUtils.empManager(learnerLearningRecords.assignedTold).WorkEmail}	When you need the Manager's Email.

MESSAGE AND GROUP BY EXAMPLES

There is a preconfigured, sample resource alert called Learner Notification of Learning in Oracle Learning Cloud that will help you to create your own messages and groups.



This preconfigured resource alert contains example content, such as example assignment filter expressions, message text with tokens, and communication method expressions that you can change to suit your organization's needs.

Out of the box, this message is set to do the following:

- Filter out all assignments created since the last time the alert appeared.
- Use the learner who has received the assignment as the recipient.
- Use tokens to pull in values that are specific to the learning assignment.
- Use conditional messages so that certain text is displayed depending on whether the assignment is required or voluntary.
- Use examples for conditional messages on assignment type and sub status.
- Use a looping mechanism that enables looping through an offering in an activity on a specialization.

MESSAGES

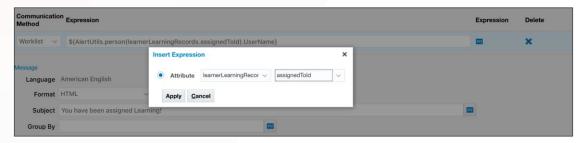
When creating a message you will need to do the following:

1. In the **Message** section, set up the notification format, select the HTML or Text format for the message text.

- Enter the message subject. You can also insert expressions in the subject using the Expression icon.
- 3. In the **Group By** field, specify an expression for the attribute that the message should be grouped by.
- Enter the message text. You can also include expressions in the text.
- 5. Use the rich text editor to format the message text. You can select options such as font, size, style, and so on.

EXPRESSIONS

When you create a subject or message you can use expressions. Expressions in resource alerts are similar to tokens found in word processing software.



You select an attribute/token that exists in the learnerLearningRecord REST resource, and add it to the subject or message. At run time, the appropriate value is placed in this attribute/token. Select the **Insert Expression** option to build expressions and insert them into the message text or subject text.

GROUP BY

The Group By functionality is used to arrange data results into groups based on some defined attribute in the learnerLearningRecord REST resource. For example, in the table below, there are two "group by" examples listed. One allows grouping by the learners' assignments (learning assigned to), and one groups by the manager's direct reports assignments (learning assigned to). You can use the expression builder to define the "group by". Note that to group by the manager directs you will need to manipulate the expression as shown in the table below. This can't be configured via the group by expression builder.

Table 5. Group By Examples

GROUP BY	DEFINITION
\${learnerLearningRecords.assignedToId}	Groups by the learning records (assignments) by the Learner (assigned to)
\${AlertUtils.empManager(learnerLearningRecords.assignedTold).UserName}	Group by the Managers directs' learning.

Table 6. Message Examples with Group By

EXAMPLES	DEFINITION	OUTPUT
Group By:	Loops through	Learn Team
\${learnerLearningRecords.assignedTold}	Learner's	

Message: \${AlertUtils.write("Learning Item TitleAssigner Name\{I earningItem Title\${AlertUtils.loop("learnerLearningRecords','\{I earningItem Title}\{I earningItem Title}\{I earningItem Title}\{I earningItem Title}	assignments in the template body	
Group By: \${AlertUtils.empManager(learnerLearningRecords.ass ignedTold).UserName} Message: \${AlertUtils.write("NameLearning Item Title>\f\rangle AlertUtils.loop("learnerLearningRecords','\${AlertUtils.loop("learnerLearningRecords','\${assignedToDisplayName}\${learningItemTitle}\${AlertUtils.write("")}\$	Loops through the directs' assignments in the template body.	Sincerely, Learn Tearn
Conditional Statements on Assignment sub status in Message <% if (assignmentSubStatus == 'ORA_ASSN_REC_NO_OFFR') { %> Please select an offering <% } else { %> The activities of the selected offering are: <% } %>	Example of additional conditional statements that can be added to display additional message text.	
Using Deep Links in Message: Click <a \${href}="\${assignmentDetailsDeepLink}">here to start learning! You have been assigned <a \${href}="\${learningItemDeepLink}">\${learningItemTitle} \${AlertUtils.loop('learnerLearningRecords',' <a \${href}="\${learningItemDeepLink}">\${learningItemTitle} \$	Use a deep link on a learning to display a link in the message.	You have been assigned Learning Here are your new assignments: Assigned To Learning Item Title Assigner Name Namita Tadoori april9-2019-1 Meg Fitzimmons Namita Tadoori cinturi0410 Namita Tadoori Sincerely, Learn Team

Table 7. Date Formatting Examples in Message

DATE FORMATTING EXAMPLES	DEFINITION	OUTPUT
\${AlertUtils.formatDate(learnerLearningRecords.assig nmentDueDate)}	Will take currently configured	This is a required assignment. It is due by 2019/04/30 12:00:00 AM

	user preference date format.	
\${AlertUtils.loop('learnerLearningRecords','\${I earningItemTitle}\${assignerDisplayName}\${d>\${AlertUtils.formatDate(assignmentDueDate,\'dd-MMM-yyyy\')}	With a specific format and inside of a loop.	Sincerely, Learn Tearn

WORKING EXAMPLES

Working Example #1:

Alert Title and Description	New Required Course Assignment - since last time alert ran
Description	This notification will target all required learning assignments created on courses since the last time the same alert ran. The Run Options Schedule will determine the span between each alert run. Set it to 1 hour and it will run every hour, taking all assignments created during that span.
	The template is not "grouped" so it will send an email for each assignment happening.
	The template will account for the case where learner is assigned to an offering or not, and will adapt accordingly
Filters	Cumulative filters (Match All)
	\${assignmentType} = 'ORA_REQUIRE_ASSIGNMENT' \${learningItemType} = 'ORA_COURSE' \${assignmentStatus} = 'ORA_ASSN_REC_ACTIVE'
	exists (SELECT 'x' from dual where \${assignmentCreatedDate} >= (select nvl(max(runs.run_end),sysdate-1) from hrc_alert_runs runs, hrc_alerts_b alerts where runs.alert_id = alerts.alert_id and alerts.alert_code = 'PUT_ALERT_CODE_HERE'))
Template Title	New Required Course Assignment - To Learners - No Grouping
Template Recipient (s)	Mail: Mail: \$\{\text{AlertUtils.person(learnerLearningRecords.assignedTold).WorkEmail}\}
	Worklist: \${AlertUtils.person(learnerLearningRecords.assignedToId).UserName}
Template Group by	None
Template Subject	You are required to take the following training: \${learnerLearningRecords.learningItemTitle}.

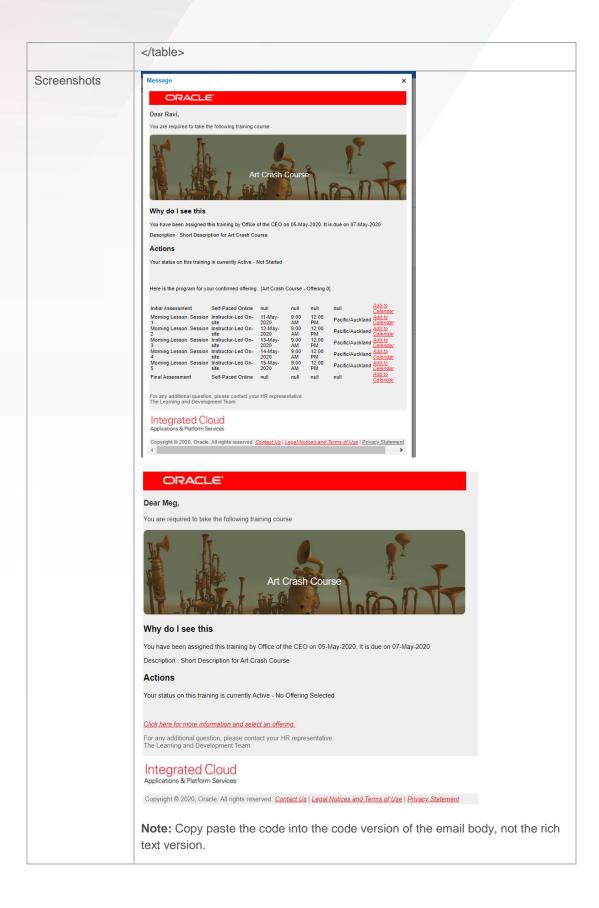
Template Code <style> .NotificationTextContent,.NotificationTableContent,.NotificationHeaderContent,. NotificationFooterContent,.NotificationCoverStyle,.CoverTransparentDiv,.Notific ationLink (font-family: Helvetica;) .NotificationTextContent {color: #000000;} .NotificationTextContent h3 {font-family: Helvetica;font-size:16px;font-style: normal;} .NotificationCoverStyle {border-radius:8px; width:600px; height:150px;background:linear-gradient(rgba(0, 0, 0, 0.45), rgba(0, 0, 0, 0.45)), url(\${learnerLearningRecords.learningItemCoverArtLink});background-repeat: no-repeat; background-size: 615px auto;} .NotificationTableContent {color: #000000; width:100%;} .NotificationFooterContent {color:#666666; font-size:12px;} .NotificationHeaderContent {background-color: #FF0000;} a.NotificationLink:link {font-family:Helvetica; color: #FF0000; font-style: italic; font-size:12px;} a.NotificationLink:hover {font-family:Helvetica; color: #000000; font-style: italic;font-size:12px;} a.NotificationLink:visited {font-family:Helvetica; color: #666666; font-style: italic;font-size:12px;} .CoverTransparentDiv {width:600px; height:150px; position: relative;} .CoverTransparentDiv p {position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); color:#FFFFF;font-size:18px;} </style> <img src="http://www.oracleimg.com/ocom/groups/public/@ocom/documents/digitalas set/302715.gif" alt="Oracle Corporation" width="123" height="30" border="0"

hspace="33">

```
<h3>Dear
${AlertUtils.person(learnerLearningRecords.assignedToId).FirstName},</h3>Yo
u are required to take the following training course
>
    <div class="CoverTransparentDiv">
     ${learnerLearningRecords.learningItemTitle}
    </div>
   <div class="NotificationTextContent">
  <h3>Why do I see this </h3>
  You have been assigned this training by
${learnerLearningRecords.assignerDisplayName} on
${AlertUtils.formatDate(learnerLearningRecords.assignmentCreatedDate, 'dd-
MMM-yyyy')}. It is due on
${AlertUtils.formatDate(learnerLearningRecords.assignmentDueDate, 'dd-MMM-
yyyy')}
```

```
>Description: ${learnerLearningRecords.liShortDescription}
   <h3>Actions </h3>
Your status on this training is currently
${learnerLearningRecords.assignmentStatusMeaning} -
${learnerLearningRecords.assignmentSubStatusMeaning} 
<div><br>&lt;% if (assignmentSubStatus == 'ORA_ASSN_REC_NO_OFFR') {
%>
<br><a class="NotificationLink"</pre>
$\href\=\${learnerLearningRecords.assignmentDetailsDeepLink}\"
;target="_blank">Click here for more information and select an offering.</a>
<br>&lt;% } else { %&gt;
<br>
Here is the program for your confirmed offering :
${learnerLearningRecords.selectedCourseOfferings[0].learningItemTitle}
<br>
${AlertUtils.loop('selectedCourseOfferings,completionDetails',",'${activit
yTitle}${activityTypeMeaning}${AlertUtils.formatDate(activity
Date,\'dd-MMM-
yyyy\')}${activityStartTime}${activityEndTime}${activityEndTime}
vityTimeZone}<a class="NotificationLink"
${href}="${addToCalendarLink}"; target="_blank">Add to
Calendar</a>')}
<br/>br>&lt;% } %&gt;
</div>
 For any additional question, please
contact your HR representative. <br/> The Learning and Development Team
```

```
</div>
<img
src="http://www.oracleimg.com/ocom/groups/public/@ocom/documents/digitalas
set/196877.gif" alt="Hardware and Software Engineered to Work
Together" border="0">
<img
src="http://www.oracleimg.com/ocom/groups/public/@ocom/documents/digitalas
set/189995.gif" alt="" width="20" height="65" border="0">
Copyright © 2020, Oracle. All rights
reserved.
<a class="NotificationLink"
href="http://www.oracle.com/us/corporate/contact/index.html" target="_blank"
rel="noopener"> <u>Contact Us</u></a> | <a class="NotificationLink"
href="http://www.oracle.com/html/copyright.html" target="_blank"
rel="noopener"><u>Legal Notices and Terms of Use</u></a> | <a
class="NotificationLink"
href="http://my.oracle.com/content/idcplg/cnt337893.pdf?ldcService=GET_FILE
&noSaveAs=1&Rendition=Web&RevisionSelectionMethod=Lates
tReleased&allowInterrupt=1&dDocName=cnt337893" target="_blank"
rel="noopener"> <u>Privacy Statement</u></a>
```



Working Example #2:

Alert Title and	All Overdue Learning Assignment - Group by Learner
Description	This notification will target all required learning assignments which are overdue. The Run Options Schedule will determine the span between each alert run. Set it to 1 day and it will run every day.
	The template is Grouped by Learner ID, meaning all assignments fitting the criteria at the time the alert is generated will be part of the same notification.
Filters	Cumulative filters (Match All)
	<pre>\${assignmentDueDate} <= sysdate \${assignmentStatus} = 'ORA_ASSN_REC_ACTIVE' \${assignmentType} = 'ORA_REQUIRE_ASSIGNMENT'</pre>
Template Title	All Overdue Learning Assignment - To Learners - Group by Learner
Template Recipient (s)	Mail: \${AlertUtils.person(learnerLearningRecords.assignedTold).WorkEmail} Worklist:
	\${AlertUtils.person(learnerLearningRecords.assignedToId).UserName}
Template Group by	\${learnerLearningRecords.assignedToId}
Template Subject	Urgent - You Still Have Overdue Learning Assignments.
Template Code	<style></td></tr><tr><td></td><td>.NotificationTextContent,.NotificationTableContent,.NotificationHeaderContent,. NotificationFooterContent,.NotificationCoverStyle,.CoverTransparentDiv,.NotificationLink {font-family: Helvetica;}</td></tr><tr><td></td><td>.NotificationTextContent {color: #000000;}</td></tr><tr><td></td><td>.NotificationTextContent h3 {font-family: Helvetica;font-size:16px;font-style: normal;}</td></tr><tr><td rowspan=2></td><td>.NotificationCoverStyle {border-radius:8px; width:600px; height:150px;background:linear-gradient(rgba(0, 0, 0, 0.45), rgba(0, 0, 0, 0.45)), url(\${learnerLearningRecords.learningItemCoverArtLink});background-repeat: no-repeat; background-size: 615px auto;}</td></tr><tr><td>.NotificationTableContent {color: #000000; width:100%;}</td></tr><tr><td></td><td>.NotificationFooterContent {color:#666666; font-size:12px;}</td></tr><tr><td></td><td>.NotificationHeaderContent {background-color: #FF0000;}</td></tr><tr><td></td><td>a.NotificationLink:link {font-family:Helvetica; color: #FF0000; font-style: italic; font-size:12px;}</td></tr><tr><td></td><td>a.NotificationLink:hover {font-family:Helvetica; color: #000000; font-style: italic;font-size:12px;}</td></tr></tbody></table></style>

```
a.NotificationLink:visited {font-family:Helvetica; color: #666666; font-style:
italic;font-size:12px;}
.CoverTransparentDiv {width:600px; height:150px; position: relative;}
.CoverTransparentDiv p {position: absolute; top: 50%; left: 50%; transform:
translate(-50%, -50%); color:#FFFFF;font-size:18px;}
</style>
<a class="NotificationLink"
href="http://www.oracle.com/" target="_blank" rel="noopener"> <img
src="http://www.oracleimg.com/ocom/groups/public/@ocom/documents/digitalas
set/302715.gif" alt="Oracle Corporation" width="123" height="30" border="0"
hspace="33"></a>
<h3>Dear
${AlertUtils.person(learnerLearningRecords[0].assignedToId).FirstName},</h3>
You still have some overdue Learning Assignments
>
  <div class="NotificationTextContent">
  <h3>Why do I see this </h3>
   You still have some overdue Learning Assignments. Please see the
summary below:
```

```
${AlertUtils.loop('learnerLearningRecords','<img
${src}="${learnerLearningRecords.learningItemThumbnailLink}" alt="Missing"
cover art" width="200" height="100"><a class="NotificationLink"
${href}="${learningItemDeepLink}"
target="_blank">${learningItemTitle}</a>${learningItemTypeMeaning}
Assigned on ${AlertUtils.formatDate(assignmentCreatedDate,\'dd-
MMM-yyyy\')}Due since
<b>${AlertUtils.formatDate(assignmentDueDate,\'dd-MMM-
yyyy\')}</b>')}
<h3>Actions </h3>For more information, please go here. 
 For any additional question, please
contact your HR representative. <br/> The Learning and Development Team
 </div>
<img
src="http://www.oracleimg.com/ocom/groups/public/@ocom/documents/digitalas
set/196877.gif" alt="Hardware and Software Engineered to Work
Together" border="0">
<img
src="http://www.oracleimg.com/ocom/groups/public/@ocom/documents/digitalas
set/189995.gif" alt="" width="20" height="65" border="0">
Copyright © 2020, Oracle. All rights
reserved.
```

 <u>Contact Us</u> | <u>Legal Notices and Terms of Use</u> | <a class="NotificationLink"

href="http://my.oracle.com/content/idcplg/cnt337893.pdf?ldcService=GET_FILE &noSaveAs=1&Rendition=Web&RevisionSelectionMethod=Lates tReleased&allowInterrupt=1&dDocName=cnt337893" target="_blank" rel="noopener"> <u>Privacy Statement</u>

Screenshot

ORACLE

Dear Meg,

You still have some overdue Learning Assignments

Why do I see this

You still have some overdue Learning Assignments. Please see the summary below



s change issue - WestCorp Specialization Assigned on 24-Apr-2020 Due since 30-Apr-2020

Course



Assigned on 21-Apr-2020 Due since 01-May-2020



HACP Validation 04_22

Assigned on 22-Apr-2020 Due since 30-Apr-2020

Actions

For more information, please go here.

For any additional question, please contact your HR representative. The Learning and Development Team

Integrated Cloud

Copyright © 2020, Oracle. All rights reserved. Contact Us | Legal Notices and Terms of Use | Privacy Statement

Note: Copy paste the code into the code version of the email body, not the rich text version.

Working Example #3:

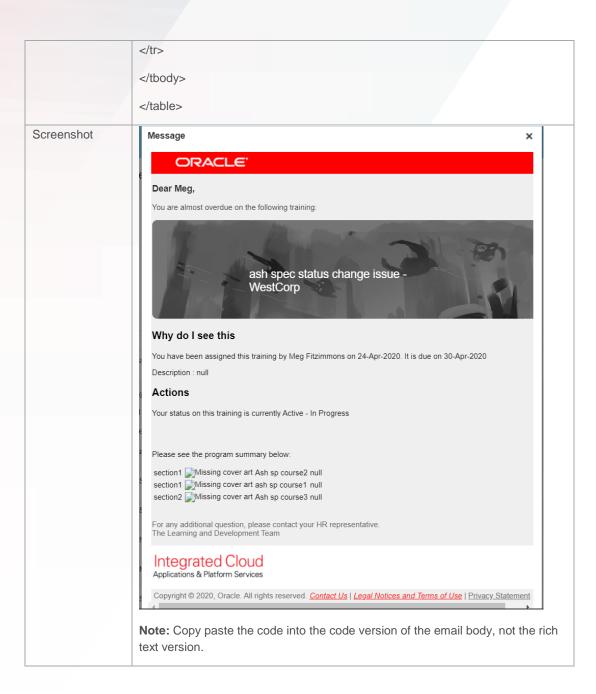
Alert Title and	Required Learning is due soon (7 days) - daily
Description	This notification will target all required learning assignments which will be overdue in the next 7 days. The Run Options Schedule will determine the span between each alert run. Set it to 1 day and it will run every day, taking all assignments soon due in that timespan.
	The template is not "grouped" so it will send an email for each assignment overdue happening.
Filters	Cumulative filters (Match All)
	\${assignmentDueDate} >= sysdate+7 \${assignmentDueDate} <= sysdate+8 \${assignmentStatus} = 'ORA_ASSN_REC_ACTIVE' \${assignmentType} = 'ORA_REQUIRED_ASSIGNMENT'
	AND Alternative filters (Match Any) \${learningItemType} = 'ORA_COURSE' \${learningItemType} = 'ORA_SPECIALIZATION'
Template Title	Learning Assignments Due Soon (7 Days) - To Learners - No Grouping
Template Recipient (s)	Mail: \${AlertUtils.person(learnerLearningRecords.assignedToId).WorkEmail} Worklist: \${AlertUtils.person(learnerLearningRecords.assignedToId).UserName}
Template Group by	None
Template Subject	Your Required Learning assignment on \${learnerLearningRecords.learningItemTitle} is due very soon (7 days).
Template Code	<style></td></tr><tr><td></td><td>.NotificationTextContent,.NotificationTableContent,.NotificationHeaderContent,. NotificationFooterContent,.NotificationCoverStyle,.CoverTransparentDiv,.NotificationLink {font-family: Helvetica;}</td></tr><tr><td></td><td>.NotificationTextContent {color: #000000;}</td></tr><tr><td></td><td>.NotificationTextContent h3 {font-family: Helvetica;font-size:16px;font-style: normal;}</td></tr><tr><td></td><td>.NotificationCoverStyle {border-radius:8px; width:600px; height:150px;background:linear-gradient(rgba(0, 0, 0, 0.45), rgba(0, 0, 0, 0.45)),</td></tr><tr><td></td><td>url(\${learnerLearningRecords.learningItemCoverArtLink});background-repeat: no-repeat; background-size: 615px auto;}</td></tr><tr><td></td><td></td></tr></tbody></table></style>

```
.NotificationHeaderContent {background-color: #FF0000;}
a.NotificationLink:link {font-family:Helvetica; color: #FF0000; font-style: italic;
font-size:12px;}
a.NotificationLink:hover {font-family:Helvetica; color: #000000; font-style:
italic;font-size:12px;}
a.NotificationLink:visited {font-family:Helvetica; color: #666666; font-style:
italic;font-size:12px;}
.CoverTransparentDiv {width:600px; height:150px; position: relative;}
.CoverTransparentDiv p {position: absolute; top: 50%; left: 50%; transform:
translate(-50%, -50%); color:#FFFFF;font-size:18px;}
</style>
<a class="NotificationLink"
href="http://www.oracle.com/" target="_blank" rel="noopener"> <img
src="http://www.oracleimg.com/ocom/groups/public/@ocom/documents/digitalas
set/302715.gif" alt="Oracle Corporation" width="123" height="30" border="0"
hspace="33"></a>
<h3>Dear
${AlertUtils.person(learnerLearningRecords.assignedTold).FirstName},</h3>Yo
u are almost overdue on the following training:
>
     <div class="CoverTransparentDiv">
```

```
 ${learnerLearningRecords.learningItemTitle}
     </div>
    <div class="NotificationTextContent">
   <h3>Why do I see this </h3>
   You have been assigned this training by
${learnerLearningRecords.assignerDisplayName} on
${AlertUtils.formatDate(learnerLearningRecords.assignmentCreatedDate, 'dd-
MMM-yyyy')}. It is due on
${AlertUtils.formatDate(learnerLearningRecords.assignmentDueDate, 'dd-MMM-
yyyy')}
>Description: ${learnerLearningRecords.liShortDescription}
   <h3>Actions </h3>
Your status on this training is currently
${learnerLearningRecords.assignmentStatusMeaning} -
${learnerLearningRecords.assignmentSubStatusMeaning} 
<div><br>&lt;% if (learningItemType == 'ORA_SPECIALIZATION') { %&gt;
<br> <div>Please see the program summary below:
${AlertUtils.loop('learnerLearningRecords,completionDetails',",'${activity}
SectionTitle}<img ${src}="${activityCoverArtLink}" alt="Missing cover
art" width="200"
height="100">${activityTitle}${activityShortDescription}<
/tr>')}
```

```
</div>
<br >> &lt;% } else { %&gt;
<br>
<div><br>&lt;% if (assignmentSubStatus == 'ORA_ASSN_REC_NO_OFFR') {
%>
<br />
<br />
<br />
a class="NotificationLink"
${href}="${learnerLearningRecords.assignmentDetailsDeepLink}"
;target="_blank">Click here for more information and select an offering.</a>
<br/><br>&lt;% } else { %&gt;
<br>
Here is the program for your confirmed offering :
${learnerLearningRecords.selectedCourseOfferings[0].learningItemTitle}
<br>
${AlertUtils.loop('selectedCourseOfferings,completionDetails',",'>${activit}
yTitle}${activityTypeMeaning}${AlertUtils.formatDate(activity
Date,\'dd-MMM-
yyyy\')}${activityStartTime}${activityEndTime}${activityEndTime}
vityTimeZone}<a class="NotificationLink"
${href}="${addToCalendarLink}"; target="_blank">Add to
Calendar</a>')}
<br/><br>&lt;% } %&gt;
</div>
<br/><br>&lt;% } %&gt;
</div>
```

```
 For any additional question, please
contact your HR representative. <br > The Learning and Development Team
  </div>
<img
src="http://www.oracleimg.com/ocom/groups/public/@ocom/documents/digitalas
set/196877.gif" alt="Hardware and Software Engineered to Work
Together" border="0">
<img
src="http://www.oracleimg.com/ocom/groups/public/@ocom/documents/digitalas
set/189995.gif" alt="" width="20" height="65" border="0">
Copyright © 2020, Oracle. All rights
reserved.
<a class="NotificationLink"
href="http://www.oracle.com/us/corporate/contact/index.html" target="_blank"
rel="noopener"> <u>Contact Us</u></a> | <a class="NotificationLink"
href="http://www.oracle.com/html/copyright.html" target="_blank"
rel="noopener"><u>Legal Notices and Terms of Use</u></a> | <a
class="NotificationLink"
href="http://my.oracle.com/content/idcplg/cnt337893.pdf?ldcService=GET_FILE
&noSaveAs=1&Rendition=Web&RevisionSelectionMethod=Lates
tReleased&allowInterrupt=1&dDocName=cnt337893" target="_blank"
rel="noopener"> <u>Privacy Statement</u></a>
```



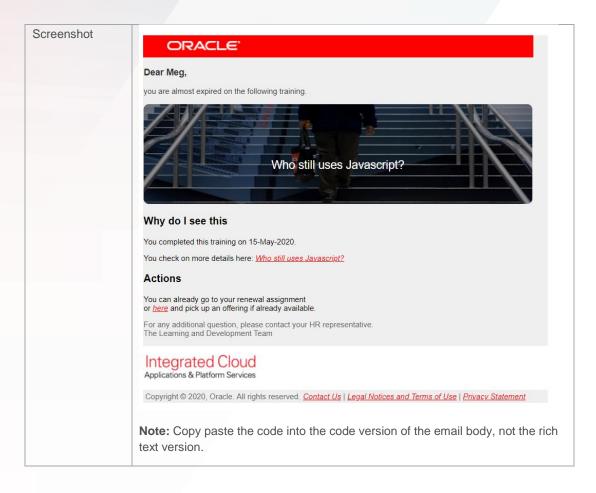
Working Example #4:

Alert Title and Description	Expiry approaching
Filters	Alternative filters (Match Any) \${learningItemType} = 'ORA_COURSE' \${learningItemType} = 'ORA_SPECIALIZATION' AND Cumulative filters (Match All) \${assignmentType} = 'ORA_REQUIRED_ASSIGNMENT' \${assignmentStatus} = 'ORA_ASSN_REC_COMPLETED' \${expirationDate} > sysdate + 30 \${expirationDate} < sysdate + 31
Template Title	Learning Assignments Near Expiry - To Learners - No Grouping
Template Recipient (s)	Mail: \${AlertUtils.person(learnerLearningRecords.assignedTold).WorkEmail} Worklist: \${AlertUtils.person(learnerLearningRecords.assignedTold).UserName}
Template Group by	None
Template Subject	Your Training on \${learnerLearningRecords.learningItemTitle} is Approaching Expiry.
Template Code	.NotificationTextContent,.NotificationTableContent,.NotificationHeaderContent,. NotificationFooterContent,.NotificationCoverStyle,.CoverTransparentDiv,.NotificationLink {font-family: Helvetica;}
	.NotificationTextContent {color: #000000;}
	.NotificationTextContent h3 {font-family: Helvetica;font-size:16px;font-style: normal;}
	.NotificationCoverStyle {border-radius:8px; width:600px; height:150px;background:linear-gradient(rgba(0, 0, 0, 0.45), rgba(0, 0, 0, 0.45)), url(\${learnerLearningRecords.learningItemCoverArtLink});background-repeat: no-repeat; background-size: 615px auto;}
	.NotificationTableContent {color: #000000; width:100%;}
	.NotificationFooterContent {color:#666666; font-size:12px;}
	.NotificationHeaderContent {background-color: #FF0000;}
	a.NotificationLink:link {font-family:Helvetica; color: #FF0000; font-style: italic; font-size:12px;}
	a.NotificationLink:hover {font-family:Helvetica; color: #000000; font-style: italic;font-size:12px;}

```
a.NotificationLink:visited {font-family:Helvetica; color: #666666; font-style:
italic;font-size:12px;}
.CoverTransparentDiv {width:600px; height:150px; position: relative;}
.CoverTransparentDiv p {position: absolute; top: 50%; left: 50%; transform:
translate(-50%, -50%); color:#FFFFF;font-size:18px;}
</style>
 <a class="NotificationLink"
href="http://www.oracle.com/" target="_blank" rel="noopener"> <img
src="http://www.oracleimg.com/ocom/groups/public/@ocom/documents/digitalas
set/302715.gif" alt="Oracle Corporation" width="123" height="30" border="0"
hspace="33"></a>
<h3>Dear
${AlertUtils.person(learnerLearningRecords.assignedToId).FirstName},</h3>you
are almost expired on the following training.
>
 <div class="CoverTransparentDiv">
      ${learnerLearningRecords.learningItemTitle}
    </div>
```

```
<div class="NotificationTextContent">
   <h3>Why do I see this </h3>
   You completed this training on
${AlertUtils.formatDate(learnerLearningRecords.completedDate, 'dd-MMM-
yyyy')}. 
You check on more details here: <a class="NotificationLink"</p>
${href}="${learnerLearningRecords.assignmentDetailsDeepLink}"
target="_blank">${learnerLearningRecords.learningItemTitle}</a>
<h3>Actions </h3>
You can already go to your renewal assignment <br/> <a <
class="NotificationLink"
${href}="${learnerLearningRecords.nextRenewalAssignmentDeepLink}"
;target="_blank">here</a> and pick up an offering if already available. 
 For any additional question, please
contact your HR representative. <br/> The Learning and Development Team
  </div>
 <img
src="http://www.oracleimg.com/ocom/groups/public/@ocom/documents/digitalas
set/196877.gif" alt="Hardware and Software Engineered to Work
Together" border="0">
<img
src="http://www.oracleimg.com/ocom/groups/public/@ocom/documents/digitalas
set/189995.gif" alt="" width="20" height="65" border="0">
```

Copyright © 2020, Oracle. All rights reserved. <u>Contact Us</u> | <u>Legal Notices and Terms of Use</u> | <u>Privacy Statement</u>



GENERAL CONSIDERATIONS

(For both Event and Resource Alerts)

You can use the working examples listed in W, but if you need to build a new alert, do it through iterative process:

- Make sure the alert will only run for reduced amount of people, and only on your staging pod, to avoid blasting unwanted test emails.
- Start small, make sure you nail down the keywords and are certain of the filters you want to use and that they work properly.
- Then you can start working on more complex features like formatting and loop/group by functionalities.

I AM GETTING SOME UI ERROR WHILE TYPING THE NOTIFICATION EMAIL BODY IN THE ALERT COMPOSER.

- **ISSUE 1: This could be due to formatting problems.** You might wanted to try some conditional formatting or specific groovy expression that is not supported.
- SOLUTION:

- Make sure to only restrict yourself to supported expressions. The error will tell you at which point there is a problem in what you were typing
- If anything else than this, try discarding the template, and create a brand new one.
- If even this does not work, then it is likely an Alert related problem, not Learning, so route the SR to appropriate team.

TROUBLESHOOTING ALERTS

All preconfigured Learning Alerts, up to release 19B, have an "Alert Code" of format WLF-0000X.

All preconfigured Learning Alerts are "Event Alerts", and will trigger when the relevant event occurs in OLC (e.g. an offering activity is updated). The one exception is "WLF-00004: Upcoming ILT Activity to Instructors Reminder 1", which is detailed below.

Most preconfigured alerts must be enabled and/or configured from Manage Learn Setup > Manage Alerts, in addition to ensuring they're enabled and configured in Tools > Alert Composer.

WLF-00004 Special Case

Although alert "WLF-00004: Upcoming ILT Activity to Instructors Reminder 1" is an event alert, there is no "event" that occurs n days before an ILT activity. While this alert would have been more appropriate as a Resource Alert, it was not possible to create it as such at the time the alert was built. It was built as an event alert. To have that alert triggered, you must run the Process Learning Alerts job. This job queries for "instructors designated to an ILT offering activity starting in n days" and triggers the alert for those instructors. This job doesn't need to be run for any of the other preconfigured learning alerts.

Event alert troubleshooting

MY TEMPLATE IS SAVED, BUT NOONE IS RECEIVING ANY EMAIL.

First of anything, make sure that in your alert setup that the template you're trying to send is active, and whether or not the "Simulate run" in the run option is set to yes or no. If it is, then people will NOT receive any email.

Also make sure the "Log Activity History" checkbox is active in the run option to troubleshoot properly.

- ISSUE 1: This could be due to alert not sending anything at all.
- SOLUTION: Verify on Alert History if the event actually triggered at all. You should see an entry with the title of your Alert in there.
 - If you see an entry, but it has a red cross, it means the event triggered, but there is an error running it.
 - It means there is a problem with the template content or the recipients.
 - Make absolutely sure the keywords you are using are supported by that specific Event alert. Remember, Resource Alert keywords will NOT work on Event Alerts, and some keywords from an Event alerts might not work on another one.
 - If all seems correct and working on a pod but not on another one of similar patch level, then it is likely an Alert issue, not a learning issue. Please route the SR to appropriate Alert team to get some help.
 - If you see an entry that has a green mark, but no message sent in the message count, it means no-one was actually targeted.
 - This is a pretty uncommon situation for Event alert, but it could be due to customer using anything else than work email for communication.

- Make sure some users should indeed be sent the notification in regards to what the triggering event is supposed to pick up, and that your templates are enabled.
- If you see an entry that has a green mark, and has a message count, then drill into the message to see who was specifically targeted.
 - If you don't see anything, it probably means you haven't checked on the "Log activity history" in the alert run options. Go and check it on, then trigger that alert again.
 - Once you are can check on the detailed activity history, each email sent will be logged in there, so you can check who is the recipient and what's in the email content.
 - If in the recipient of an entry you do not see any username or any email address, then there is something wrong with your recipients.
 Make sure you use the supported keywords without any additional groovy expression in the recipients fields.
 - If it contains an email and it is the correct ones, then:
 - Check on your email client side if you have any blacklisting or any spam procedure that evacuates the mails sent by Oracle HCM Cloud
 - Make sure you haven't activated the Test email on the BPM general settings.
- ISSUE 2: This could be due to alert not being active.
- SOLUTION: go into the Learning Specialist UI:
 - My Client Group/Learning/Global Settings/Alerts subtab verify the alert you want to use is active and has the right options if any.
 - Also make sure you understood very well the covered functional usecase for that Event alert.
- ISSUE 3: The alert might simply not be running. In the Alert History you do not see any entry for your alert at all
- SOLUTION:
 - Verify the ESS jobs for some of the specific alerts have run. Some of the Event alerts need this to happen so it is even considered being sent by the Alert system.
 - If it did not run even if it was scheduled, have support and devs looking into it
 - If it did run, have a look at the logs and see if it failed and why, make sure to document that in the SR.
 - If EVERYTHING else above was verified and supposed to be working, then there could be a problem with the triggering event itself.
 - In this case, try reproducing it on a different pod.
 - Support can open a bug to devs.

Resource alert troubleshooting

I AM GETTING SOME UI ERROR WHILE TRYING TO SAVE FILTERS IN MY ALERT.

 ISSUE 1: This could be due to wrong keyword problems. (There error there should be explicit about it).

SOLUTION:

- o Make sure you are using the right keywords, or keywords that are actually supported by the selected resource's payload (that keyword needs to exist)
- For this, use the expression builder will definitely help you figuring out what exists and what does not.
- Remember, one typo is enough to make it go wrong.
- ISSUE 2: This could be due to wrong formatting problem. (There error there should be explicit about it).
- SOLUTION:
 - Make sure you haven't put any special character in there from a weird copy paste.
 - As a general statement:
 - Any string format data should be designated between single quotes, such as \${learnerLearningRecords.assigmentType} = 'ORA JOIN ASSIGNMENT'
 - Any numeric or date format data should not have single quotes such as \${learnerLearningRecords.withdrawnRequestedDate}> sysdate-1
 - In general, the expression builder will help you overcoming these formatting problems most of the time

MY TEMPLATE IS SAVED, BUT NOONE IS RECEIVING ANY EMAIL.

First of anything, make sure that in your alert setup that the template you're trying to send is active, and whether or not the "Simulate run" in the run option is set to yes or no. If it is, then people will NOT receive any email.

Also make sure the "Log Activity History" checkbox is active in the run option to troubleshoot properly.

- ISSUE 1: This could be due to alert not sending anything at all.
- SOLUTION: Verify on Alert History if the notification ran at all. You should see an entry with the title of your Alert in there.
 - If you see an entry, but it has a red cross, it means the event triggered, but there is an error running it.
 - It means there is a problem with the template content or the recipients.
 - Check on the error log, you might find some clues in there saying either the filter are incorrect (bad request) or there could be something wrong with the keywords you are using inside the notification body itself or in the recipients.
 - Make absolutely sure the keywords you are using are supported by that specific Resource alert. Also make sure you are not referencing an Event alert keyword in the resource alert, that won't work.
 - You can check this out either through the expression builder or on the official REST API documentation here https://docs.oracle.com/en/cloud/saas/humanresources/20b/farws/index.html.
 - If you see an entry that has a green mark, but no message sent in the message count, it means no-one was actually targeted.
 - This means the filters you have put are either wrong or too restrictive to pick up the data you thought would be picked up.
 - Make sure you have the right data in the database and the filters are actually targeting them properly.
 - If you see an entry that has a green mark, and has a message count, then drill into the message to see who was specifically targeted.
 - In that your test, make sure you actually target a username in the recipients, and not a person ID or a display name, just to make sure at least worklist is receiving the notification, then check it in the UI.

- Also check the email address you put in the person's Work Email is correct and is the one targeted in your alert template "recipient" field.
- If you don't see anything, it probably means you haven't checked on the "Log activity history" in the alert run options. Go and check it on, then trigger that alert again.
- Once you are can check on the detailed activity history, each email sent will be logged in there, so you can check who is the recipient and what's in the email content.
 - If in the recipient of an entry you do not see any username or any email address, then there is something wrong with your recipients. Make sure you use the supported keywords without any additional groovy expression in the recipient fields.
 - If it contains an email and it is the correct ones, then:
 - Check on your email client side if you have any blacklisting or any spam procedure that evacuates the mails sent by Oracle HCM Cloud
 - Make sure you haven't activated the Test email on the BPM general settings.
- ISSUE 2: This could be due absent or wrong scheduling in the run options.
- SOLUTION: go in the resource alert details, in the run options:
 - Make sure the run options scheduling is active (and not "On Demand")
 - Make sure the run options actually fit the filters you have put.
 - If you put a filter that looks into the data base on the last day, you need to have your schedule run daily, or you will have duplicate notifications
 - If you put a filter that looks into the database on the last hour, you need to have your schedule run hourly, or many emails will be missed
 - Make sure the dates you are using for filtering are timestamped if you are have hourly schedule, or you might miss some entries.

THE FILTERS DO NOT SEEM TO WORK AND I AM GETTING EMAILS I SHOULD NOT, OR I'M NOT GETTING THE ONES I WANT

- ISSUE 1: this could be due to filters not being used properly.
 - SOLUTION:
 - Make sure you do not have contradicting filters.
 - For example you cannot have a filters looking at both Required AND Voluntary assignments at the same time, because an assignment is either one OR the other.
 - In this case make sure that for alternative cases, you have the set of filters with "Any" and not "All" while setting it up.
 - Make sure you are filtering on the correct resource/sub-resource.
 - For example you cannot send information based on an offering assignment creation date and have filters set up on course assignment creation date. You need to make your resource filtering to the usecase you want to set up.
 - Make sure you are not weirdly cumulating several filters inside a single expression.
 - Having a complex AND/ OR inside a single filter expression usually does not work very well.
 - Best practice is to separate these different pieces into distinct filters, at least when troubleshooting, to understand what works and what does not.
 - ISSUE 2: The keywords in filters might not retrieve the expected data.

- SOLUTION:

- If everything above has been thoroughly checked, then you might suspect the keywords used in the filters are not retrieving the right data.
- In this case, put these keyword(s) directly in the email body and perform a safe test
 just to see how that keyword looks like and what data it renders and in which format.
 This will tell you if it retrieves what you expect.
- If it retrieves the wrong value or Null for no explainable reason, then Support can log a bug to Devs

THE NOTIFICATION MESSAGE DOES NOT RENDER THE WAY I WANT.

- ISSUE 1: You might see some expression results between squared brackets [and]
- SOLUTION: This means the alert generator is expecting an array of value and not just a single one.
 - You are using a Group By option in your template?
 - If yes, it means the system expects several entries in the database to be put into the same notification (like several course assignments for the same user in a single notification).
 - Make sure you are using a "Loop" functionality, so the system understands what to do with all these potential values.
 - This does NOT seem related to a group by option.
 - It means the system is still expecting potentially several data at the same time for the same entry (Like potentially several offering titles for a single course assignment)
 - Make sure you are using a "loop functionality" so the system understands what to do with all these potential values.
 - If you are certain only one value could only be retrieved, then you need to suffix the resource with [0] inside the keyword: \${learnerLearningRecords.selectedCourseOfferings[0].offeringTitle} → this should retrieve only the first and only supposed value in the array of potential data.
- ISSUE 2: The table you have created with loop functionality or conditional statements does not render well
 - This could be due to the HTML code somewhat losing the proper formatting
 - Make sure when you have complex groovy expressions or conditional statements and formatting that you always do them in the CODE version of your notification body, and avoid switching back and forth between rich text editor and code version.
 Otherwise the HTML code gets re-generated and you will loose your pieces of codes.
 - Do the modifications in HTML code and save the HTML code.

MY ALERT IS TAKING A VERY LONG TIME TO PROCESS AND ENDS UP BEING TIMED OUT / ERRORED AFTER A WHILE

- ISSUE 1: This could be due to filtering not being precise enough, and query being too big.
- SOLUTION:

- If you are creating a notification on a sub resource (offering assignments), only putting some offering related resource will be very taxing on the system, because the system needs to first look into the entire parent resource table (all assignments).
- So make sure to always put some filters also on the parent resource to evacuate useless querying.
 - Example: if you want some notifications about offerings, also put a filter on parent resource to isolate the course assignment first, and probably another one to evacuate the course assignment statuses that are useless
 - So if you want a notification on any offering assignment entering waitlist, you should also have a set of filters as follows:
 - Cumulative filters (Match all) on learnerLearningRecords.selectedCourseOfferings
 - \${assignmentStatus} = 'ORA ASSN REC WAITLISTED'
 - exists (SELECT 'x' from dual where \${enteredWaitlistDate} >= (select nvl(max(runs.run_end),sysdate-1) from hrc_alert_runs runs, hrc alerts b alerts where runs.alert id = alerts.alert_id and alerts.alert_code = 'PUT_ALERT_CODE_HERE'))
 - Cumulative filters (Match All) on learnerLearningRecords
 - \${learningItemType} = 'ORA_COURSE'
 - \${assignmentType} <> 'ORA_RECOMMEND_ASSIGNMENT'

FREQUENTLY ASKED QUESTIONS

How do I know if my alert is triggering and not sending messages, or not triggering?

Check Alert Composer > Alert History.

Why isn't my alert triggering?

Did you enable it in Manage Learn Setup?

Why is my alert triggering, but nobody gets the email or worklist notification?

Check that the alert is not configured with "Simulate = Yes" (in Alert Composer → Alert → Run Options), which runs the alerts, but does not actually send the notifications.

Why are recipients getting two copies or duplicate emails?

The worklist can be configured to send email messages to recipients. If the alert is sending to both email and worklist, and the worklist is configured to send email, then there will be two emails sent.

Why are there [] brackets appearing around every attribute in the template?

When you use the Group By function, it groups all the records that have matching <whatever attribute vou specified>. So, if you say in the template "give me \${learningItemTitle}", it will give you an array. surrounded by [] brackets, of the values of that attribute for all records in the group. If you're using Group By and you don't want these brackets, and you just want to specify one record in the group, use \${learnerLearningRecords[0].learningItemTitle}, instead of the above expression to specify the first record in the array.

ORACLE CORPORATION

Worldwide Headquarters

500 Oracle Parkway, Redwood Shores, CA 94065 USA

Worldwide Inquiries

TELE + 1.650.506.7000 + 1.800.ORACLE1 + 1.650.506.7200 FAX

oracle.com

CONNECT WITH US

Call +1.800.ORACLE1 or visit oracle.com. Outside North America, find your local office at oracle.com/contact.



blogs.oracle.com/oracle





Integrated Cloud Applications & Platform Services

Copyright © 2020, Oracle and/or its affiliates. All rights reserved. This document is provided for information purposes only, and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group. 0720

White Paper Understanding Alerts in Oracle Learning Cloud July 2020

Author: Oracle Learn Cloud Product Management Contributing Authors:



