



Cornerstone Learning Connector for ADP Lyric Edge Integration Guide

Version history

Version	Date	Description
1.0	May 27, 2024	Original document

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Overview

The Cornerstone Learning Connector for ADP Lyric integration is an API-based solution that provides a mechanism to synchronize a customer's user and organizational unit (OU) records in Cornerstone. This one-way integration allows a centralized management of user and OU data in ADP® to avoid redundant data entry work.

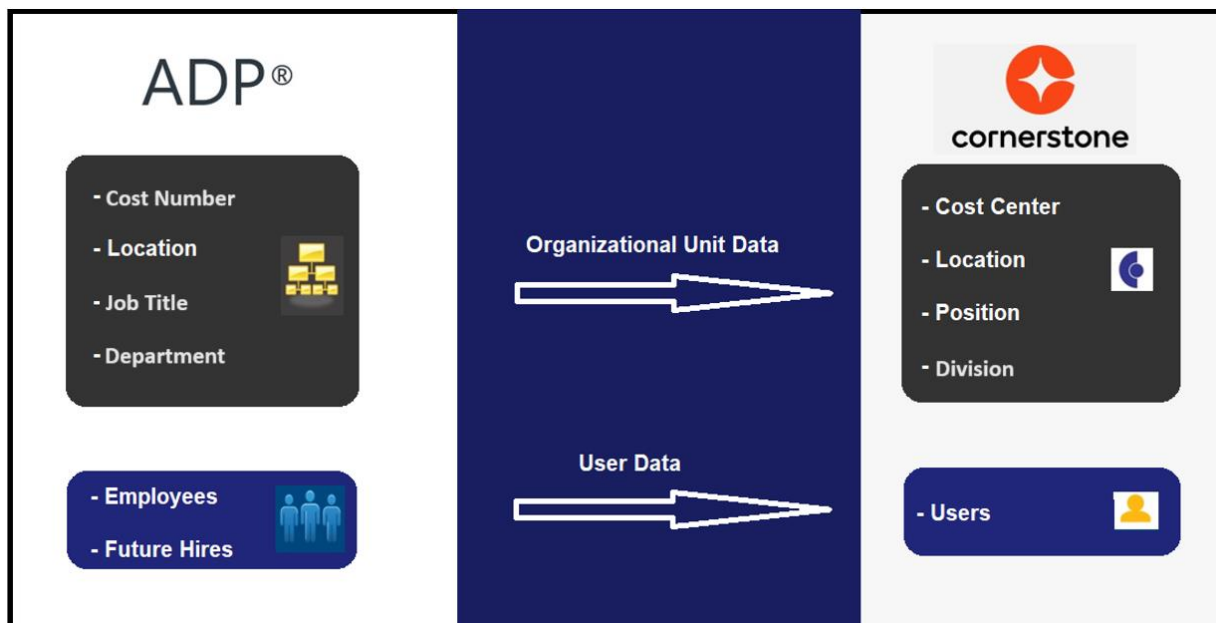
The following functionalities are included with this integration:

1. Unidirectional transfer of active OU and user data from ADP to Cornerstone
2. Nightly synchronization of OU and user data
3. Ability to trigger the integration on-demand.
4. Map ADP Lyric Validation Tables data to Cornerstone standard organizational units (OU).
5. Exclude users from the sync using Validation Tables and/or employment.
6. Summary and log of synced OU and user data via email notification



Subscribing to the Cornerstone Learning Connector for ADP Lyric on ADP Marketplace automatically subscribes your organization to Cornerstone Learning Single Sign-On for ADP Lyric.

Please refer to the Cornerstone Learning Single Sign-On for ADP Lyric starter guide for install and set-up details.



Considerations

1. The following Cornerstone Learning Connector for ADP Lyric implementations are NOT supported:
 - Employees that belong to multiple companies with different positions, locations, etc.
 - Employees that belong to multiple companies and have identical OU codes within the same OU type.
2. The integration is only available to customers whose Cornerstone portal reside in the LAX or US data center.
3. The integration is only available to customers who have access to the U.S. ADP Marketplace.
4. The integration runs nightly at a pre-defined schedule for both OU and user sync. The schedule cannot be modified. See Modes of Synchronization section for details.
5. The following items are NOT supported:
 - OU custom fields
 - Location OU time zone
 - Legal Entity OU
 - Secure custom fields
 - Termination-related fields
 - Setting hierarchy for standard and custom OUs
6. The integration does not support passing of the user's Cornerstone generated global unique identifier (GUID) number from ADP into Cornerstone. Special considerations should be given for Cornerstone Recruiting clients. Please consult with your Cornerstone Account Manager or Solution Architect.
7. Employee and future hires will always be part of the user sync.
8. The single sign-on integration is bundled with the Cornerstone Learning Connector for ADP Lyric app in ADP Marketplace. Subscribing to the Cornerstone Learning Connector for ADP Lyric automatically subscribes your organization to the Cornerstone Learning Single Sign-on for ADP Lyric. However, you will need to set-up these two integrations separately in Cornerstone. Please refer to the Cornerstone Learning Single Sign-on for ADP Lyric starter guide for install and set-up details.

Please consult with your Account Manager should you need a custom solution to meet your business requirements.

Prerequisites

1. Cornerstone
 - Cornerstone product
 - The administrator setting up the integration must have the permissions noted under Appendix A: Security Permissions.
 - The integration is only available to customers whose Cornerstone portal reside in the LAX or US data center.
2. ADP Lyric account

Install & Setup Instructions

It is strongly recommended to test the integration in either your Cornerstone Pilot or Stage environment before setting it up in Production. Testing the integration in Pilot or Stage will synchronize the users and OUs from your ADP Lyric to your Cornerstone Pilot or Stage environment.

To test the integration in your Cornerstone Pilot or Stage environment, follow the steps below.

1. Log in to [ADP Marketplace](#).
2. Note that the Pilot and Stage app listings below are NOT visible on ADP Marketplace. You must be logged in to ADP Marketplace to access the Pilot and Stage listings.
3. Click on “Try the Free Edition” to begin the subscription process.
4. Continue with the setup by following the instructions below starting from step 4 under the sub-section “Setup Steps in ADP”.



After you complete your testing in Pilot or Stage, **DISABLE** the integration in your Cornerstone Pilot or Stage environment before enabling the integration in the production environment. **Failure to do this may cause issue with the data sync process.**

Setup Steps in ADP

1. Log in to [ADP US Marketplace](#).
2. Search for **Cornerstone Learning Connector for ADP Lyric**.
3. Select the integration and begin the subscription process by clicking on **Buy Now**.
4. Upon subscribing to the app in ADP Marketplace, the following will occur:
 - The solution will be added to “My Apps” in ADP Marketplace.
 - You will receive an email from Cornerstone that contains your unique subscription token.

Please retain this email. The subscription token is required to setup the integration in Cornerstone. You may also use this subscription token when setting up single sign-on in Cornerstone.

The subscription token is unique per Cornerstone portal environment (e.g., the subscription token generated for Stage CANNOT be used to configure the integration in Production).

The email subject line will include the Cornerstone portal environment for which this token is generated for. See Appendix B: Email Notification & Log for a sample of a subscription token email notification.

If you do not receive the subscription token email, please do the following:

- Verify your email address in Cornerstone Learning Connector for ADP Lyric that is used for notification. This is found under the communication preference.
 - Check your spam/junk email folder as the subscription token email might have gone in this folder.
 - Cancel the subscription then re-subscribe again to the same app in ADP Marketplace.
5. Navigate to “My Apps” and select the Cornerstone Learning Connector for ADP Lyric app.
 - If testing the integration, select the appropriate tile.
 - Pilot: Cornerstone Learning (PILOT) Connector for ADP Lyric
 - Stage: Cornerstone Learning (STAGE) Connector for ADP Lyric

6. Complete the Consent Request form by clicking on Allow. This gives ADP consent to share data with Cornerstone.

Note that the integration between ADP Lyric and Cornerstone will only be enabled after you provide your consent.

A confirmation message will be displayed when you complete the Consent Request form.

7. Click CONTINUE which directs you back to the “My Apps” section. This completes the subscription and consent request process in ADP Marketplace.

Setup Steps in Cornerstone

1. Log in to your Cornerstone portal.
2. Navigate to the Edge Marketplace (Admin > Tools > Edge > Marketplace).
3. Search for **Cornerstone Learning Connector for ADP Lyric** then click on the integration tile.
4. Click on **Install**.
5. Review the terms and conditions then select the checkbox for **I have read, understand, and agree to the above terms and conditions**. Click on **Install**.
6. After installation go to Edge Integration (Admin > Tools > Edge > Integration). A tile **Cornerstone Learning Connector for ADP Lyric** will be visible. Click on **Configure** button on the tile. You will be directed to the Settings page.
7. Configure the integration on the Settings page.
 - **Subscription Token:** This is the subscription token that was provided via email after purchasing the integration in ADP Marketplace (for additional details, see step 4 in Setup Steps in ADP). This field is required to save the page.
 - **Notification Email:** An audit log is generated each time the integration runs which will be delivered to the specified email address(es). If entering multiple email addresses, separate each with a comma (.). The field is required to save the page.

Note the following:

- Email sender will be from IntegrationCenter@csod.com. See Appendix B: Email Notification & Log for a sample of the notification email and log.
- You will receive an email notification when the sync completes.
- If syncing both user and OU data, you will receive a separate email notification for the user and OU syncs.

- **Client ID and Client Secret:** These are your organization's unique credentials which ADP uses to authenticate requests originating from Cornerstone. You do NOT need to enter any value in these fields. The fields will be auto populated when you save the Settings page.

Note the following:

- Changing the auto-populated values will cause issues with the integration.
 - If the Client ID and/or Client Secret value has been changed, clear out the values in both fields then save the save the Settings page. The correct Client ID and Client Secret values will be re-populated if the subscription token is valid.
- **User Identifier:** This relates to the User ID field on the Cornerstone User Profile page. The integration allows mapping of the User ID field to any of the following ADP Lyric fields: Associate ID, Email Address, Position ID. The default selection is 'Associate ID'. The field is required to save the page.
 - Note that you will have to run a full sync if the User Identifier mapping is updated to a new selection. For example:
 - The User Identifier is mapped to Email Address on the Settings page.
 - The integration runs and loads the user's email address in the User ID field in your Cornerstone portal.
 - You realize that you don't want to use email address as the user's User ID in Cornerstone. So, you update the User Identifier mapping to Associate ID on the Settings page.
 - You must run a full sync after updating the User Identifier mapping to avoid duplicate user records from being created in your Cornerstone portal (see Sync Toggle Switches below for details).
 - **Sync Type:** This indicates what data type is included in each sync. The integration allows the option to sync both OUs & Users, OUs only, or user only. The default selection is 'OUs & Users'. The field is required to save the page.
 - **Sync Toggle Switches**
 - Full Sync Now
 - To run a full sync on-demand, perform the following actions:
 - Enter all required fields and configure the integration as desired.
 - Turn on the Full Sync Now toggle switch.
 - Click on the Save Settings button.
 - This is an optional field.
 - The toggle switch is turned off once the integration is triggered.

- Depending on the Sync Type selection, the sync will pull all active OUs and/or relevant users from ADP.
- OU sync is always a full sync
- Delta Sync Now
 - To run a delta sync on-demand, perform the following actions:
 - Enter all required fields and configure the integration as desired.
 - Turn on the Delta Sync Now toggle switch.
 - Click on the Save Settings button.
 - This is an optional field.
 - The toggle switch is turned off once the integration is triggered.
- Depending on the Sync Type selection, the sync will pull all active OUs and/or relevant users from ADP.
- OU sync is always a full sync.
- Note the following:
 - If the Delta Sync Now toggle switch is enabled prior to the initial scheduled run, the integration will pull all active OUs and/or users.
 - If no successful syncs occurred in the past 30 days, then the integration will pull all active OUs and/or users.
- The integration can only run once (scheduled or on-demand) within a three-hour period AND if no other sync (user or OU) is currently running.
- **Standard Organizational Unit Mapping:** This table allows you to specify the mapping between the Cornerstone standard OU type and ADP Lyric Validation Table.
 - To add a standard OU mapping, perform the following actions:
 - Click on the **+ Add New Standard Organizational Unit Mapping** button.
 - Under **Cornerstone Standard OU Type**, select an OU type.
 - Select the appropriate ADP Validation Table value.
 - To delete an OU mapping, click on the trash icon.
 - Note the following:
 - The integration supports mapping a Cornerstone OU to any of the following ADP Lyric Validation Tables: Cost Number, Location, Job Titles, and Department.

- At least one OU type must be mapped when “Users & OU” or “OU Only” is selected in Sync Type.
 - User record constraints that are implemented on the UI also apply to this integration. For example, if the Position OU is a required field on the User Profile page, then the Position OU must be mapped on the Settings page. If a user comes through the integration without a Position OU value, then the user will not be created/modified in Cornerstone.
8. Click on **Save Settings** which will then take you to the **Manage Integrations** page.
 9. Search for **Cornerstone Learning Connector for ADP Lyric** and verify that the toggle switch has been automatically enabled.
 - Note the following:
 - First integration sync will pull all active OUs and users.
 - Subsequent integration sync will pull all users that were created/modified since the last successful delta sync (scheduled or on-demand).
 - OU sync will always be a full sync.

Modes of Synchronization

Scheduled Sync

The integration is scheduled to run as follows:

- OU Sync: 3:00 AM U.S. Pacific
- User Sync: 4:00 AM U.S. Pacific

The nightly OU sync runs on full mode while the nightly user sync runs on delta mode.

On-demand Sync

The integration can be triggered on-demand from the Edge Settings page using the Sync Now toggle switches. You can choose to run a delta or full sync.

- **Delta Sync Now**
To run a delta sync on-demand, turn on the Delta Sync Now toggle switch then click on the Save Settings page. The delta sync will pull all OUs and/or users that were created and/or modified in ADP Lyric since the last successful delta sync (scheduled or on-demand).
- **Full Sync Now**
To run a full sync on-demand, turn on the Full Sync Now toggle switch then click on the Save Settings page. The full sync will pull all OUs and/or users from ADP Lyric.

Note the following:

- The toggle switch is turned off once the integration is triggered.
- The integration can only run once (scheduled or on-demand) within a 3-hour period AND if no other sync (user or OU) is currently running.

Integration Workflow

Before you rollout the integration within your organization, we recommend that you test the integration workflows.

OU Sync

Step 1: Create and or update a validation table in ADP Lyric.

- The integration supports synchronizing standard OUs that are mapped to any of the following ADP Validation Table:
 - Cost Number
 - Location
 - Jib Titles
 - Department

Step 2: Trigger the Delta Sync Now from the Settings page or allow the nightly scheduled sync to run.

Step 3: When the synchronization process is complete, the following will occur:

- A standard OU is created and/or updated in Cornerstone.
- The email address(es) defined on the Settings page will receive an email notification with a summary and detailed log of OUs that have been processed successfully or failed. See Appendix B: Email Notification & Log for an example of the email notification and log.

User Sync

Step 1: Create and or update a validation table in ADP Lyric.

Step 2: Trigger the **Delta Sync** Now from the Settings page or allow the nightly scheduled sync to run.

Step 3: When the synchronization process is complete, the following will occur:

- New and/or updated user records are created and/or updated in Cornerstone.
- Email address(es) defined on the Edge Settings page will receive an email notification with a summary and a detailed log of users that have been processed successfully or failed. See Appendix B: Email Notification & Log for an example of the email notification and log.

Below is a list of additional scenarios that you may include in your testing. Note that this is not an exhaustive list. You should validate the integration using varied scenarios relevant to your business needs.

- Exclude users from being created/updated in Cornerstone.
- Create new hire with a future hire date.

Note the following:

1. Only active users in ADP Lyric will be created/updated in Cornerstone. Changes to an inactive employee record in ADP Lyric will not be reflected in Cornerstone. In this case, the record will be flagged as "Skipped" in the notification log.
 - Example: An inactive employee's email address is updated in ADP Lyric. Since the change is to an inactive employee's record in ADP, the integration will not update the inactive employee's email address in Cornerstone. This inactive user record will be flagged in the notification log as "Skipped".
2. If the user sync fails due to network issues, the integration will attempt to re-try unprocessed user records in the next successful sync (scheduled or on-demand). This does not apply to user records that failed due to validation errors (e.g., missing required field, missing OU, etc.). Any retried user will be included in the summary and log. See Appendix B: Email Notification & Log for an example:
 - The re-try logic will look at the past 7 days and sync all failed records (except validation errors). However, if a full sync runs within the past 7 days, the retry will only look at failed records from the last full sync.

Organizational Unit Mapping

	Cornerstone Organizational Unit	ADP Lyric Validation Table
1	Cost Center	Configurable to any of the following: <ul style="list-style-type: none">• Cost Number• Location• Job Titles• Department
2	Location	
3	Position	
4	Division	

- It is recommended that the OU mapping on settings page be done as:
 - Cost Center (Cornerstone) = Cost Number (ADP)
 - Location (Cornerstone) = Location (ADP)
 - Position (Cornerstone) = Job Titles (ADP)
 - Division (Cornerstone) = Department (ADP)
- It is mandatory to map "Division" OU of Cornerstone with any one OU of ADP, as "Division" OU is mandatory in Cornerstone, without which the user will not be created.

Cost Center OU Field Mapping

	Cornerstone Field Name	ADP Lyric Field Name	Comment
1	Name	Description or Title	Required field
2	ID	Code	Required field
3	Active	-	Defaults to True

Division OU Field Mapping

	Cornerstone Field Name	ADP Lyric Field Name	Comment
1	Name	Description or Title	Required field
2	ID	Code	Required field
3	Active	-	Defaults to True

Location OU Field Mapping

	Cornerstone Field Name	ADP Lyric Field Name	Comment
1	Name	Description or Title	Required field
2	ID	Code	Required field
3	Active	-	Defaults to True

Position OU Field Mapping

	Cornerstone Field Name	ADP Lyric Field Name	Comment
1	Name	Description or Title	Required field
2	ID	Code	Required field
3	Active	-	Defaults to True

User Field Mapping

NOTE: Besides the required fields noted in the table, additional fields may be required based on your portal configuration.

	Cornerstone Field Name	ADP Lyric Field Name	Comment
1	User Id	Configurable <ul style="list-style-type: none"> Associate OID Business Email Position ID 	Required field
2	Username	Worker ID	Required field
3	Email Address	Business Email	-
4	Prefix	Title	-
5	First Name	First Name	Required field
6	Middle Name	Middle Name	-
7	Last Name	Last Name	Required field
8	Personal Email Address	Personal Email	-
9	Suffix	Suffix	-
10	Phone	Personal Phone	-
11	Mobile Phone	Business Phone	-
12	Fax	Fax	-
13	Country	Country (Physical Address)	-
14	Address Line 1	Address Line 1 (Physical Address)	-
15	Address Line 2	Address Line 2 (Physical Address)	-

	Cornerstone Field Name	ADP Lyric Field Name	Comment
16	City	City (Physical Address)	-
17	State	State (Physical Address)	-
18	Zip	Zip Code (Physical Address)	-
19	Last Hire Date	Most Recent Hire Date	If Last Hire Date in ADP is blank, then the integration will sync Original Hire Date
20	Original Hire Date	Original Hire Date	-
21	Manager	Reports To	-
22	Division ID	Code	Configurable to the following ADP Lyric validation tables: <ul style="list-style-type: none"> • Cost Number • Location • Job Titles • Department
23	Location ID	Code	
24	Position ID	Code	
24	Cost Center ID	Code	

Appendix

Appendix A: Security Permissions

Permission Name	Permission Description	Category
Edge Marketplace - Manage	Grants access to the Marketplace service for Edge Integrate where the administrator can browse and purchase third-party integrations that can be used to extend the Cornerstone system. This permission cannot be constrained. This is an administrator permission.	Edge
Edge Integrations - Manage	Grants access to the Integrations service for Edge Integrate where the administrator can configure, enable, and disable their third-party integrations that are used within the Cornerstone system. This permission cannot be constrained. This is an administrator permission.	Edge

Appendix B: Notification Email & Log

1. Notification Email

a. Subscription Token email notification

From: IntegrationCenter@csod.com <IntegrationCenter@csod.com>
Sent: Thursday, 11/11/2021 1:01 PM
To: [redacted]
Subject: Cornerstone Learning Connector for ADP Lyric Subscription Notification [Stage]

← **Cornerstone portal environment in which the subscription token is only valid for**


Hello,

Thank you for subscribing to the Cornerstone Learning Connector for ADP Lyric. The token below is required to complete the configuration process for this integration in Cornerstone Edge Marketplace.

Please note that in ADP Marketplace, subscribing to the Cornerstone Learning Connector for ADP Lyric automatically subscribes you to the Single Sign-on (SSO) Integration. You may use the same token below to configure the SSO integration in Cornerstone Edge Marketplace.


Subscription Token: 939ca36a-319e-494f-99f1-a279682cd7f2 ← **Enter this subscription token value on the Edge Settings page**

*** This is an automatically generated email. Please do NOT reply to this email as this address is not monitored.***

 **cornerstone**

b. Notification email when the user sync is complete.

From: integrationcenter@csod.com <integrationcenter@csod.com>
Sent: Monday, September 23, 2024 1:52 PM
To: V...
Subject: User Sync Notification for Cornerstone Learning Connector for ADP Lyric for i... Portal name and environment

 User_Synchronization_Report_2... 97 KB User synchronization report attached in the email

Hello,

Thank you for using the Cornerstone Learning Connector for ADP Lyric. This email provides the status of the full user sync that ran on (UTC).

Record Type	Added	Updated	Failed
Users	381	9	484
Retried Users	0	0	0


Synchronization ID - a5d5e2bf-8787-4d78-ad31-955175b0586e

To report an issue on this integration with **Cornerstone**, please submit a GCS case through Support Central and include the following details:

1. Preface the case subject with "ADP Lyric Core"
2. Include the Synchronization ID

To report an issue on this integration with **ADP**, please provide the ADP Correlation ID for the record in question.


*** This is an automatically generated email. Please do NOT reply to this email as this address is not monitored.***

 **cornerstone**

- **Added:** this value indicates the number of user records added in your Cornerstone portal
- **Updated:** this value indicates the number of user records that have been updated in your Cornerstone portal
- **Failed:** this value indicates the number of user records that were not created, updated, or processed through the integration
- **Retried User:** this value indicates the number of users that failed to process in a previous sync and are re-tried in the current sync (row will not be visible if no users have been re-tried in the current sync)
- **Synchronization ID:** this value is a Cornerstone-defined ID associated with the sync. Each sync has its own unique synchronization ID.

c. Notification email when the OU sync is complete.

From: integrationcenter@csod.com <integrationcenter@csod.com>
Sent: T
To: 1
Subject: Cornerstone Learning Connector for ADP Lyric OU Sync Notification for

 OU_Synchronization_Report_2 57 KB

Hello,

Thank you for using the Cornerstone Learning Connector for ADP Lyric. This email provides the status of the organizational unit (OU) sync that ran on 1 UTC.

OU Type	Added	Updated	Failed	Correlation ID
Division	187	0	0	
Position	1111	0	0	
Cost Center	410	0	0	
Location	154	0	0	
Summary	1862	0	0	


Synchronization ID - 21f4bcc3-bdfa-49d4-8e04-10e071c36e0c

To report an issue on this integration with **Cornerstone**, please submit a GCS case through Support Central and include the following details:

1. Preface the case subject with "ADP Lyric Core"
2. Include the Synchronization ID

To report an issue on this integration with **ADP**, please provide the ADP Correlation ID for the record in question.

*** This is an automatically generated email. Please do NOT reply to this email as this address is not monitored.***

 **cornerstone**

- Added: this value indicates the number of OU records added in your Cornerstone portal
- Updated: this value indicates the number of OU records that have been updated in your Cornerstone portal
- Failed: this value indicates the number of OU records that were not created, updated, or processed through the integration.

2. Logs

a. User Log

Ref	Type	Status	Message
CC-47	Division	Added	
EU-99	Division	Updated	
MM-81	Division	Updated	
ATL03	Location	Added	
OL-399819932019	Location	Added	
OL-221	Location	Added	
DBA-255	Position	Added	
SR-569	Position	Added	
TecAn-2386	Position	Added	
AUTPCS-I-2445	Position	Added	
AEU-112	Cost Center	Added	
AEU-115	Cost Center	Added	
AEU-12	Cost Center	Added	
AEU-1327	Cost Center	Added	

b. OU Log

Ref	User Id	Name	Status
1429	G3NSGAYE43N4PSZY	Catalina	Added
1055	G3G98FAWJGG1NG48	Delfina	Added
2170	G3PS5R8YDVJY8ZAS	Velda	Added
1944	G3G98FAWJGG179TH	Ramiro	Added
1575	G3G98FAWJGG136BH	Rose	Added
10246	G3G98FAWJGG1EWG3	Rose	Added
2214	G3PS5R8YDVJYRC6W	Zelda	Added
2223	G30F76FY6SQKP2MY	Brook	Added
10391	G3RFDZ4A5BG5EYYN	Bianca	Added
1634	G3G98FAWJGG1W5JG	Rowan	Added
1527	G3HG72ECP82TSJPQ	Nick	Added
2157	G3RFDZ4A5BG5YE0C	Braden	Added

Appendix C: FAQs

Q: Can the scheduled run time be modified?

A: No. The integration run time is currently not configurable.

Q: I've copied the configurations from Pilot environment. Why does the Integration fail on production although it worked on Pilot environment?

A: Each environment has a different ADP subscription token. Please follow the following steps:

1. Erase the Subscription Token, Client ID, and Client Secret,
2. Populate the Subscription Token with the production App subscription token
3. The subject line in the subscription token email notification indicates the environment for which the subscription token is valid for. Please verify that you are using the correct subscription token.
4. Save the setting to allow the integration to populate the Client ID and Secret.
5. Enable and test the integration again.

Q: How can I ensure that no duplicates are created in my Cornerstone portal?

A: The integration compares the User ID for existing users in your Cornerstone portal with what is being synced from ADP Lyric. To prevent duplicates, the existing User ID values should either be ADP's Associate ID, Email Address, or Position ID. Please configure the integration accordingly.

Q: Does the integration support future terminations?

A: No, the integration does not support future terminations.

Q: Will Associate OID (User ID) of a user change when a customer transitions from one ADP integration to another?

A: Yes. Associate OID (User ID) will change. All users of the Cornerstone's customers will need to be mapped to a new Associate OID. For further details, please contact your Cornerstone Account Manager.

Q: Where can I find the Single-Sign On (SSO) integration guide?

A: Please refer to the following [link](#) for detailed information on SSO integration.