



Single Sign-On Administrator Guide

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Overview

Employee Database Integration (EDI) allows your company to integrate its HRIS employee data into LinkedIn applications. The integration includes an optional configuration for Single Sign-On with your SSO solution. In this case, the administrator for your company account can configure your company to authenticate to a LinkedIn platform application using SSO through integration with the enterprise platform.

The integration is configured through the LinkedIn Account Center and is only available for some paid LinkedIn applications.

Prerequisites

- Company account
- Full administrator privileges
- Identity Provider (IdP) administrative privileges

About Single Sign-On (SSO)

Enterprise Single Sign-On (SSO) allows your company's employees to sign into supported LinkedIn applications using their corporate credentials instead of their LinkedIn credentials.

Using SSO and integrating with an SSO provider is not required to use LinkedIn applications. If SSO is not configured, your employees can authenticate themselves using their current personal LinkedIn credentials or create a new member account.

Why Should you use Single Sign-On?

- Leverage your existing company's authentication
- Better security when employees use your company's established password protocols rather than their individual accounts
- Easier user management when employees leave your company

Supported SSO Protocols

We currently support SAML version 2.0.

Configuring Single Sign-On (SSO)

Getting Started with SSO

1. Access the Account Center using the following link:
<http://www.linkedin.com/enterprise/accountcenter/settings>

Note: Some applications also have an access point from their application settings. For example, in Learning you can click **Go to Admin** in the banner and select **Settings > Global Settings**.

The application settings for SSO reflect the application you have accessed.

The screenshot shows the LinkedIn Account Center interface. At the top, there is a navigation bar with the LinkedIn logo, 'ACCOUNT CENTER', and a settings icon. Below this is a secondary navigation bar with 'HOME', 'PEOPLE', 'CONTENT', 'REPORTS', and 'SETTINGS' (which is highlighted). The user's current application is identified as 'Learning - Default'. The main content area is divided into two sections: 'Application Settings' and 'Global Settings'. Under 'Application Settings', there is a card for 'Single Sign-On (SSO)' with the description 'Set up Single Sign-On with a third party Identity Provider'. Under 'Global Settings', there are three cards: 'SCIM Setup' (Add configurations to integrate your user database using a SCIM Server), 'OAuth Access Tokens' (Generate and manage security tokens to grant access to third party applications (e.g., for automating a daily CSV upload of employees)), and 'SFTP Setup' (Create Users that will be able to upload CSV files via SFTP). Each card has a downward-pointing chevron icon on the right side.

2. Open the Single Sign-On (SSO) panel.

Single Sign-On (SSO)

Set up Single Sign-On with a third party Identity Provider

Authenticate users with SSO Edit ? OFF TEST ON

Verify the identity of your users with your company's single sign-on

Configure your Identity provider SSO settings. Download

Download the metadata file and import it into your Identity Provider
[OR Click Here to load and copy individual fields from the form.](#)

Configure the LinkedIn service provider SSO settings.

Now, get a metadata file from your Identity Provider and upload it here, or manually enter values

Go to your Identity Provider (e.g. Azure Active Directory) to get the information you need.

Upload XML file

Want to input the information manually? [Click here](#)

SSO Options

Sign AuthnRequest

Yes (default) No

Authentication Request Signing Algorithm

SHA1 (default) SHA256

SAML Request Binding

HTTP-Redirect (default) HTTP-Post

AuthnContextClassRef

PasswordProtectedTransport and windows

Custom Attribute Mapping

Enter custom attribute: Map to: Remove

[Add another](#)

Save

Automatically assign licenses Toggle

Your team will be automatically granted licenses by clicking on activation link

[Go to SAML validator](#)

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LinkedIn

3. Select your SSO options.
 - a. Sign AuthnRequest:
 - Yes (default)
 - No
 - b. Authentication Request Signing Algorithm:
 - SHA1 (default)
 - SHA256
 - c. SAML Request Binding:
 - HTTP-Redirect (default)
 - HTTP-Post
 - d. AuthnContextClassRef:
 - Don't send this value (default)
 - urn:oasis:names:tc:SAML:2.0:ac:classes>PasswordProtectedTransport
 - urn:oasis:names:tc:SAML:2.0:ac:classes:kerberos
 - urn:federation:authentication:windows
 - PasswordProtectedTransport and windows
 - urn:oasis:names:tc:SAML:2.0:ac:classes:X509
 - urn:oasis:names:tc:SAML:2.0:ac:classes:TLSClient
 - e. Custom Attribute Mapping. You can specify custom name mappings to correspond to IdP settings (rather than using the default mappings). Enter your custom attribute and select the attribute to map it to. The following fields can be mapped to custom, user-provided attributes.
 - First Name
 - Last Name
 - Primary Email Address
 - Mobile Phone Number
 - Work Phone Number
 - Work Title
 - Job Function
 - Manager
 - Department
 - Job Level
 - Worker Type
 - Worker Status
 - Building Code
 - Desk Location

See [Requirements for Just-in-Time \(JIT\) Provisioning](#) for more information about the default attributes.

- (Optional) Click **Go to SAML validator** to specify whether to sign SAML requests. Paste in the SAML response and click **Validate**.



Validate the SAML Response from your identity provider.

Your SAML Response

Validate Clear

- (Optional) If you need to configure multiple application instances, you can select the **<application name> - <instance>** menu in the banner, then select the instance you want to configure. For example, in Learning you might be selecting the **Learning - Default** menu (as shown in the screenshot in Step 1).

Note: Application instances in the menu are organized by application, so if you have access to multiple instances of the same application (for example, two Recruiter instances), then you see a header for Recruiter followed by the names of the individual application instances.

Connecting to your Identity Provider

If your identity provider supports metadata, and if you've configured SAML using version 2.0, you can download an XML configuration file to send them, which they can then upload to automatically configure their settings for connecting to your LinkedIn products.

Determine if you can download a metadata file or if you need to work with individual fields, then follow one of the procedures in the next sections.

Downloading a File

- Click **Download** to download a metadata file you can use with your Identity Provider system. The `metadata.xml` file downloads through your browser.
- Verify that the metadata file contains the following:

```
<md:AssertionConsumerService
Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-POST"
Location="https://www.linkedin.com/checkpoint/enterprise/saml/[A
CCOUNT ID]" index="0"/>
```
- Access your Identity Provider system.
- Upload the metadata file.
Note: You might not be able to import this file into your Identity Provider. For example, Okta does not have this functionality.
- Return to the SSO setup.
- Click **OK** on the upload dialog, then see [Configuring your Identity Provider](#).

Working with Individual Fields

1. Click the link to load and copy individual fields from the form in your Identity Provider.

Step 1.

Download the metadata file and import it into your Identity Provider

OR Click here to load and copy individual fields from the form

Download

Entity ID

linkedin.com

Assertion Consumer Service (ACS) URL

https://www.linkedin.com/checkpoint/enterprise/saml/1005904

SP X.509 Certificate (signing)

```
MIIDozCCAougAwIBAgIJAKLiyNZf3mW7MA0GCSqGSIb3DQEBBQUAMGxhCzAJBgNVBAYTA1VTMzQw
CQYDVQQLDAJkQTEWMBQGA1UEBwwNTW91bnRhaW4gVmlldzEdMBsGA1UECgwUTGlua2VhSW4gQ29y
cG9yYXRpb24xFTATBgNVBAMMDGxpbnmtlZGlulmNvbTAeFw0xNjA1MTcyMjAzNDRaFw0yNjA1MTUy
MjAzNDRaMGxhCzAJBgNVBAYTA1VTMzQwCQYDVQQLDAJkQTEWMBQGA1UEBwwNTW91bnRhaW4gVmlldzEd
```

2. Copy and paste the fields you want to include.

Configuring your Identity Provider

Configure your Identity Provider to talk with LinkedIn's platform. Determine if you can upload a metadata file from your Identity Provider or if you need to enter values manually, then follow one of the procedures in the next sections. If you aren't using JIT, proceed to [Uploading a File](#) or [Entering Values Manually](#).

Requirements for Just-in-Time (JIT) Provisioning

One reason SAML 2.0 has become so popular is its flexibility when sending extra information to the service provider. When an identity provider sends an assertion, it includes attributes describing the user. These attributes allow LinkedIn to both identify the user and automatically provision users. A few of the possible attributes are described in this section.

Email Address (Required)

Every user is required to have a valid email address, even when using SSO.

Note: When testing with multiple IdP identities, email addresses must be unique.

Because the identity provider is responsible for managing user information, it must send the user's email address in its assertion. Identity providers use different naming conventions, so LinkedIn looks for an email address in the following attribute names sequentially:

- EmailAddress
- email
- Email
- Mail
- emailAddress
- User.email
- <http://schemas.xmlsoap.org/ws/2005/05/identity/claims/emailaddress>

First Name (Optional)

Just like email addresses, identity providers might send the first name in several common fields. To provide out-of-the-box compatibility with most identity providers, LinkedIn tries to find the first name in the following attribute names:

- FirstName
- first_name
- firstname
- firstName
- User.FirstName
- <http://schemas.xmlsoap.org/ws/2005/05/identity/claims/givenname>

Last Name (Optional)

LinkedIn looks for the last name in the following attribute names:

- LastName
- last_name
- lastname
- lastName
- User.LastName
- <http://schemas.xmlsoap.org/ws/2005/05/identity/claims/surname>

Additional Optional Attributes

You can provide additional information, including the following attribute names.

Note: While these attributes are stored by LinkedIn, they are currently not visible from the UI to use for user management.

Attribute Name	Supported Variations
Department	<ul style="list-style-type: none">• departmentName• department• User.Department
Manager	<ul style="list-style-type: none">• Manager• manager• User.Manager
Mobile Phone Number	<ul style="list-style-type: none">• mobilePhoneNumber• PhoneNumber• phone

	<ul style="list-style-type: none"> • phoneNumber • User.PhoneNumber • http://schemas.xmlsoap.org/ws/2005/05/identity/claims/mobilephone
Work Phone Number	<ul style="list-style-type: none"> • WorkPhoneNumber • Workphone • workPhoneNumber • User.WorkPhoneNumber • http://schemas.xmlsoap.org/ws/2005/05/identity/claims/otherphone
Work Title	<ul style="list-style-type: none"> • workTitle • Title • WorkTitle • User.WorkTitle
Job Function	<ul style="list-style-type: none"> • jobFunction • JobFunction • User.JobFunction
Job Level	<ul style="list-style-type: none"> • JobLevel • jobLevel • User.JobLevel
Worker Type	<ul style="list-style-type: none"> • WorkerType • workerType • User.WorkerType
Worker Status	<ul style="list-style-type: none"> • WorkerStatus • workerStatus • Status • User.WorkerStatus
Building Code	<ul style="list-style-type: none"> • buildingCode • building
Desk Location	<ul style="list-style-type: none"> • deskLocation • desk

Example

Email: jdoe@company.com

First name: Jane

Last Name: Doe

Mobile Phone Number: 5551234567

Title: Manager, Software Engineering

Department: Software Applications

Start Date: 03/07/16

Job Level: Individual Contributor

Worker Type: employee

Worker Status: active or inactive

Manager: dsmith

Uploading a File

1. Click **Upload XML file** to add the metadata file from your Identity Provider.

Step 2.

Now, get a metadata file from your Identity Provider and upload it here, or manually enter values

Go to your Identity Provider (e.g. Okta) to get the information you need.

[Upload XML file](#)

Want to input the information manually? [Click here](#)

2. Select the file and click **Open**. If successful, the fields display filled with the metadata.

Entering Values Manually

1. Use the **Click here** link to add information manually.

Configure the LinkedIn service provider SSO settings.
Now, get a metadata file from your Identity Provider and upload it here, or manually enter values

Issuer String or Entity ID ⓘ	Budget group ⓘ
<input type="text"/>	Select a Budget Group ▼
IdP redirect endpoint ⓘ	SAML Subject Identity attribute name ⓘ
<input type="text"/>	<input type="text"/>
X.509 Public certificate ⓘ	
<input type="text"/>	

[+ Add another certificate](#)

[Save SSO configuration](#) [Cancel](#)

2. Enter the following information:

- Issuer String or Entity ID: must match the `md:EntityDescriptor entityID` field
- Budget group: group to use to assign licenses using *just-in-time* provisioning.
- Redirect URL: must match the `md:SingleSignOnService location` field
 - **Note:** LinkedIn currently only supports the `urn:oasis:names:tc:SAML:2.0:bindings:HTTP-Redirect` binding.
- SAML identity location: This is the field used to identify the employee identity stored in your Identity Provider with the employee identity stored through the EDI process at LinkedIn. LinkedIn uses the following rules to identify the employee:
 - If the SAML Authentication response provides a SAML assertion containing a set of attributes, you can provide the SAML attribute name of the attribute containing the employee's identity in this text field. For example, if an integer `employeeId` is sent in a SAML attribute called `employeeId`, you could insert `employeeId` into the **SAML identity location** field, and LinkedIn uses the `employeeId` sent in each assertion to look up the employee identity. To enable this, you must upload the `employeeId` of each user in the EDI process.
 - If nothing is specified in this field, LinkedIn looks up the employee by the value of the `NameId` sent in the `<saml:Subject>`. This field *must* be the primary email address of the user, as uploaded during the EDI process.
- If we cannot find the user by either the attribute set in the **SAML identity location** field or by the primary email address, as set in the `NameId` in the `<saml:Subject>`, LinkedIn does *not* authenticate the user.
- Public Certificate: LinkedIn verifies the validity of the SAML assertion sent in the SAML authentication response using the x.509 certificate used for signing by your Identity Provider. If we cannot validate the signature of the authentication response, your user is not authenticated.

3. Click **Save SSO Configuration**.

Assigning Licenses

You can automatically assign licenses to your employees by toggling **Automatically assign licenses**. When enabled, users are automatically granted a license if they don't already have one.

Note: User attributes required on the Identity Provider side display when you enable automatic licenses.



Note: Automatically assigning licenses is not currently supported for Sales Navigator.

Enabling Single Sign-On

Authenticate users with SSO

Verify the identity of your users with your company's single sign-on



After you have completed your configuration, enable SSO. Click the **Authenticate users with SSO** toggle. See the [Enable Options](#) table for information about when to use the available options.

Enable Options

Status	Description
Off	<ul style="list-style-type: none">No SSO implementation setup required.Users can sign in to assigned licenses with their LinkedIn-based logic.
Test	<ul style="list-style-type: none">SSO is set up and configured.Test mode enforces SSO for IdP-initiated flows for employees given access through the IdP, but still allows normal LinkedIn-based sign in for SP-initiated flows. It does not require users to authenticate through the IdP to sign in. They can access the application directly through LinkedIn.This is useful when configuring SSO for the first time, or if your IdP only supports IdP-initiated flows.
On	<ul style="list-style-type: none">SSO is set up and enabled.Users must sign in through the IdP-initiated flow or SP-initiated flow (unless IdP only supports IdP-initiated flow, in which case they do not have SP-initiated). Regardless of which method is used, authentication is required. <p>Warning: When selecting On after initial setup, do not close the window until you are sure SSO is working properly; otherwise, you will need to contact customer support to disable SSO on your account. It's recommended that you use the Test option to validate your IdP-initiated flow before setting SSO to On.</p>
<ul style="list-style-type: none">IdP-Initiated Flow: When a user starts in their Identity Provider (such as Okta, AAD, or Ping) to access an application.SP-Initiated Flow: When a user goes directly to the application or service provider to access their license.	

Verifying your Setup

Note: Before verifying your setup, you must have your binding completed. For information and steps on binding, see LinkedIn's Privacy and Security Whitepaper: Account Center Employee Database Integration (EDI) and Single Sign-On (SSO).

Verify that you're correctly integrated with your Identity Provider and have the following in place:

- Have a LinkedIn application with your enterprise identity added (for example, through a CSV upload)
- SSO is enabled
- An application configured in your Identity Provider, corresponding to the LinkedIn application, configured as previously instructed

Test using:

- Your Identity Provider initiated sign in
- LinkedIn's referral page, then sign in

Support

Supporting Documentation

- Adding Employee Data Administrator Guide
- Privacy and Security Whitepaper: Account Center Employee Database Integration (EDI) and Single Sign-On (SSO)
- [Tutorial: Azure Active Directory integration with LinkedIn Learning](#)
- [Tutorial: Azure Active Directory integration with LinkedIn Sales Navigator](#)
- [Tutorial: Azure Active Directory integration with LinkedIn Elevate](#)

Technical Issues

If you have technical issues with the SSO setup, contact your account team or application support team through the help center.

LinkedIn's Privacy and Data Security Policy

<https://www.linkedin.com/legal/privacy-policy>

LinkedIn Security Contacts

If you have any security questions or you would like to report a security issue, write to us at security@linkedin.com.