

# Identity Implementation Guide

Version 39.0, Spring '17





# CONTENTS

#### Contents

Installing Identity Connect
Chapter 10: Tutorial: Test Single Sign-On from an External Identity Provider
Establish a Federation ID
Chapter 11: Monitor Applications and Run Reports
Monitor Usage for Connected Apps
Chapter 12: Use External Identities to Extend Your Organization to New Users 39
Chapter 13: Get More Information about Salesforce Identity, Single Sign-On and         Security       41
Index

# **CHAPTER 1** What Is Salesforce Identity?

Salesforce Identity connects your Salesforce org users with external applications and services while providing administrative tools for monitoring, maintaining, and reporting user apps and authorization.



Note: Salesforce Identity Demo (12:16 minutes)

Take a guick tour of Salesforce Identity features.

Salesforce Identity is an identity and access management (IAM) service with the following features.

- Cloud-based user directories, so user accounts and information are stored and maintained in one place, while available to other services or applications.
- Authentication services to verify users and keep granular control over user access. You can select which apps specific users can use, require two-factor authentication, and set how often individual users must log in to maintain their session.
- Access management and authorization for third-party apps, including UI integration, so a user's apps and services are readily available.
- App user provisioning that streamlines the process for providing and removing access to apps to multiple users simultaneously.
- An API for viewing and managing your deployment of Identity features.
- Identity event logs for creating reports and dashboards on single sign-on and connected app usage.
- Salesforce Identity Connect, a connector that integrates Microsoft Active Directory (AD) with Salesforce. You can manage AD users and Salesforce users simultaneously. You can configure Identity Connect to give AD users access to their Salesforce orgs without having to log in again.

To implement Salesforce Identity, use any of the following.

#### Security Assertion Markup Language (SAML)

Security Assertion Markup Language (SAML) is an XML-based protocol that allows you to transfer user information between services, for example, from Salesforce to Microsoft 365. Apps use this information to authorize users and enable single sign-on. Salesforce supports SAML for single sign-on into Salesforce from a corporate portal or identity provider.

#### OAuth 2.0

OAuth 2.0 is an open protocol used for single sign-on to allow secure authorization between applications. OAuth authorization flows describe the options for implementing OAuth in Salesforce orgs. For more information on specific flows, see Force.com REST API Developer Guide.

#### **OpenID Connect**

Open ID Connect is an authentication protocol based on OAuth 2.0 that sends identity information between services. With OpenID Connect, users can log in to another service, like Gmail, and then access their Salesforce org without logging in again.

#### My Domain

My Domain allows you to define your own domain name within the Salesforce domain (for example,

https://companyname.my.salesforce.com). My Domain makes it easier to manage login and authentication and allows you to customize your login page. Salesforce requires My Domain if you want to use Lightning components in Lightning tabs, Lightning Pages, or as a standalone app.

#### **Connected Apps**

A connected app integrates an application with Salesforce using APIs. Connected apps use standard SAML and OAuth protocols to authenticate, provide single sign-on, and provide tokens for use with Salesforce APIs. In addition to standard OAuth capabilities,

#### **EDITIONS**

Available in: Salesforce

Classic

Available in: Enterprise, Performance, Unlimited, Developer, and

**Database.com** Editions

connected apps allow Salesforce admins to set various security policies and have explicit control over who can use the corresponding apps.

#### **App Launcher**

The App Launcher allows you to give your users easy access to apps that they use most often. Users go to the App Launcher to launch Salesforce and third-party apps without having to log in again (referred to as single sign-on). The App Launcher presents tiles that link to your connected apps and standard apps, all from one location in Salesforce. All Lightning Experience users have access to the App Launcher. Salesforce Classic users must have the "Use Identity Features" permission and the App Launcher option in their profile set to **Visible**. In Salesforce Classic, the App Launcher appears as an app in the Force.com App menu.

#### **Identity License**

The Identity license grants users access to Identity features. Salesforce Classic users must have the "Use Identity Features" permission to get the App Launcher. All Lightning Experienceusers have the App Launcher.

Identity licenses are included with **Enterprise**, **Performance**, and **Unlimited** Editions. Ten free Identity user licenses are included with each new **Developer** Edition org.

#### **External Identity License**

An External Identity license grants Identity features such as the App Launcher and single sign-on to external users. With External Identity, you can give your customers and partners access to your org through an external identity community.

The license is included with all user licenses in **Enterprise**, **Performance**, and **Unlimited** Editions. Five free External Identity user licenses are included with each new **Developer** Edition org.

#### **Identity Provider and Service Provider integration**

An *identity provider* is a trusted provider that lets you use single sign-on to access other websites. A *service provider* is a website that hosts applications. You can enable Salesforce as an identity provider and define one or more service providers. Your users can then access other applications directly from Salesforce using single sign-on. Single sign-on can be a great help to your users: instead of having to remember many passwords, they only have to remember one. Plus, the applications can be added as tabs to your Salesforce organization, which means users don't have to switch between programs.

#### **Salesforce Identity Connect**

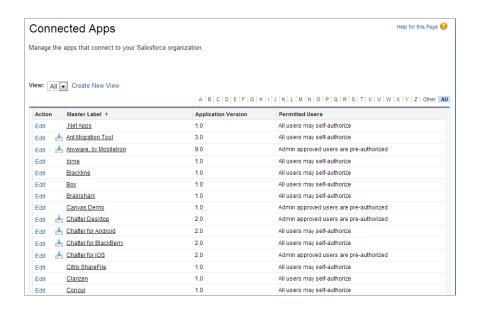
Identity Connect integrates Microsoft Active Directory with Salesforce via a service that runs on either Windows or Linux platforms. It gives AD users single sign-on access to Salesforce. When syncing AD users, the identity service provider can be either Salesforce or Identity Connect.

#### **Two-Factor Authentication**

With two-factor authentication enabled, users are required to log in with two pieces of information, such as a username and a one-time password (OTP). Salesforce supports user-defined OTPs and OTPs generated from software or hardware devices.

Here's the Salesforce admin's connected apps page where you manage user access to apps based on user profiles and permission sets.

#### What Is Salesforce Identity?



You can create and run Identity reports for details on user access and single sign-on usage. For more information on reporting, see Monitor Applications and Run Reports.

# **CHAPTER 2** How to use Salesforce Identity

This is a quick narrative showing how a company can combine some of the Salesforce Identity features to improve the experience of their employees while providing administrative control over the use of various applications.

Salesforce Identity provides single sign-on (SSO) for employees to sign in to multiple applications to get their job done. Some of those applications are integrated into their Salesforce organization, and some might be third-party, external applications.

Here's an example of how a single company, Universal Containers, might use several Salesforce Identity features to meet their needs.



**Example:** Universal Containers has employees that need to sign-in to multiple applications to get their job done. It needs a single sign-on (SSO) solution, and decides to use Salesforce to do it. In order to set-up Salesforce as an SSO provider (also called the "identity provider"), Universal Containers must set up a custom domain using "My Domain" in their Salesforce organization. With their own domain, Universal Containers creates and manages their own authorization settings as employees log in to that domain.

Then, Universal Containers leverages Security Assertion Markup Language (SAML) to pass authentication and authorization information between their domain and other providers. Users logged into the Universal Containers custom domain are able to use external applications without having to log in again. And conversely, these users can also access the Universal Containers domain while using approved external applications, without having to log in again (in this case, the external application is the "identity provider"). Users can have single sign-on access between any application that supports SAML standards, such as Google Apps.

Next, Universal Containers decides they also want to enhance their own security while enabling single sign-on. They implement two-factor authentication to require users to enter a unique one-time code while logging in. Universal Containers also customizes the login page, making the page more consistent with their corporate identity and easier for users logging in to see where they are before entering authentication information.

Using the App Launcher, Universal Containers controls the apps that are available to individual users, and how frequently the user needs to log in. They also use the App Launcher to extend single sign-on to their mobile users through a mobile browser or the Chatter native mobile app.

For login and user management, they decide to integrate Active Directory with Salesforce using Identity Connect, so users in their corporate database are added to their Salesforce organization. Users with corporate accounts can easily log in to their Salesforce organization using their Active Directory credentials, or they can use single sign-on from their desktop.. Furthermore, changes to users in either Active Directory or Salesforce are integrated between the two environments.

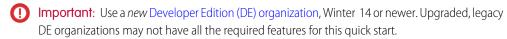
After the system is up and running, Universal Containers builds reports and dashboards to track users' login history and application usage. With these reports, administrators can keep track of authorized usage, then adjust authorization as needed.

# CHAPTER 3 Quick Start: Set up your own domain, add a Connected App and use the App Launcher

#### In this chapter ...

- Use My Domain to Create Your Own Subdomain Name
- Launch Your
   Connected App from the Salesforce App
   Launcher

This quick start provides a hands-on tutorial to familiarize yourself with combining several Salesforce Identity features.



All you need to start using Identity features is: a custom Salesforce domain created using My Domain, a connected app to launch from your Salesforce organization, and the App Launcher configured for the appropriate users of the allowed connected apps.

# Use My Domain to Create Your Own Subdomain Name

Create your own subdomain to better manage login and authentication for your Salesforce org. A subdomain is also a way to brand your org with your company name, for example, https://yourcompanyname.my.salesforce.com.

While you're learning to use My Domain, don't perform these steps in your production org. For a good introduction, see the Trailhead module, User Authentication. After you deploy your new domain name, you can't reverse it without contacting Salesforce Support.



Note: Setting Up My Domain (5:11 minutes)

See how to use My Domain to customize your Salesforce org URL and login.

A subdomain name helps you better manage login and authentication for your org in several key ways. You can:

- Highlight your business identity with your unique domain URL
- Brand your login screen and customize right-frame content
- Block or redirect page requests that don't use the new domain name
- Work in multiple Salesforce orgs at the same time
- Set custom login policy to determine how users are authenticated
- Let users log in using a social account, like Google and Facebook, from the login page
- Allow users to log in once to access external services

The following steps use the company name "universal containers" as an example. However, each My Domain must be unique, so pick a name of your own.

- 1. From Setup, enter My Domain in the Quick Find box, then select My Domain.
- 2. Enter the subdomain name you want to use within the sample URL. For example, if a company called Universal Containers uses the subdomain universalcontainers, the company's login URL is

https://universalcontainers.my.salesforce.com/. Your name can include up to 40 letters, numbers, and hyphens.

You can't use these reserved words for subdomains:

- www
- salesforce
- heroku

You can't start the domain name with:

- root
- status
- a hyphen (-)
- **3.** Click **Check Availability**. If your name is already taken, choose a different one.
- **4.** Click **Register Domain**.
- 5. You receive an email when your domain name is ready for testing. It can take a few minutes.

#### Test your domain.

- 1. In the Salesforce email, click the link to log in to your new subdomain. Or you can return to My Domain from Setup: Enter My Domain in the Quick Find box, then select My Domain. Now you're at Step 3 of the wizard.
- 2. Notice that the URL in the browser address bar shows your new subdomain.

At this point, you're the only one in your org that has the subdomain URL. As you click through the UI, check that all the pages use the new subdomain.



**Note:** If you've customized your org, such as modified buttons or added Visualforce pages, look for links that don't redirect to the subdomain. Broken links can occur when URLs reference your instance name (such as na1.salesforce.com). For more information, enter "hard-coded references" in *Salesforce Help*.

#### Deploy your domain.

After you're sure that all links redirect to your subdomain, you can make the subdomain available to users.

- 1. From Setup, enter My Domain in the Quick Find box, then select My Domain.
- 2. Click Deploy to Users.

Next, edit your login policies for the subdomain in My Domain Settings, and customize your login page.

# Launch Your Connected App from the Salesforce App Launcher

Configure the connected app for single sign-on from your Salesforce org and add it to the App Launcher.

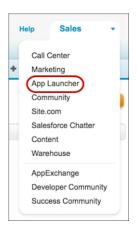
The App Launcher presents tiles that link to your connected apps and standard apps, all from one location in Salesforce. All Lightning Experience users have access to the App Launcher. Salesforce Classic users must have the "Use Identity Features" permission and the App Launcher option in their profile set to **Visible**. In Salesforce Classic, the App Launcher appears as an app in the Force.com App menu. As the Salesforce admin of your DE org, you already have access to the App Launcher.

- 1. To launch your connected app from your Salesforce org, you need to give it a start URL.
- 2. In your Salesforce org, from Setup, enter "Connected Apps" in the Quick Find box, then select the option for managing connected apps.

You see your new connected app listed.

- 3. Click Edit next to your connected app name.
- 4. In the Basic Information section, give your app a Start URL.

  For example, if your app is "glacial-temple-2472," the URL is <a href="https://glacial-temple-2472.herokuapp.com/">https://glacial-temple-2472.herokuapp.com/</a>.
  - Note: Include the https://prefix.
- 5. Click Save.
- 6. In Lightning Experience, click iii to open the App Launcher. In Salesforce Classic, select the App Launcher from the drop-down app menu.



You see your connected app on the App Launcher tab. You can click it to launch the app.

You can give your connected app a custom logo, and customize the App Launcher appearance. Then, monitor connected app usage for all your users with reports and adjust your security settings as needed.

# **CHAPTER 4** My Domain

#### In this chapter ...

- Set Up a My Domain Name
- My Domain URL Changes
- Test and Deploy Your New My Domain Subdomain
- Guidelines and Best Practices for Implementing My Domain
- Get System
   Performance and
   Maintenance

   Information with My

Add a subdomain to your Salesforce org URL with the My Domain Salesforce feature. Having a subdomain lets you highlight your brand and makes your org more secure. A subdomain is convenient and allows you to personalize your login page.

Using My Domain, you define a subdomain that's part of your Salesforce domain. For example, developer is a subdomain of the salesforce.com domain. With a subdomain, you replace the URL that Salesforce assigned you, like

https://na30.salesforce.com, with your chosen name, like https://somethingcool.my.salesforce.com. A subdomain is also referred to as a custom domain. However, a custom domain has a specific meaning for Salesforce Communities.

#### **EDITIONS**

Available in: both Salesforce Classic and Lightning Experience

Available in: Performance, Unlimited, Enterprise, Developer, Professional, and Group Editions.

A subdomain name helps you better manage login and authentication for your org in several key ways. You can:

- Highlight your business identity with your unique domain URL
- Brand your login screen and customize right-frame content
- Block or redirect page requests that don't use the new domain name
- Work in multiple Salesforce orgs at the same time
- Set custom login policy to determine how users are authenticated
- Let users log in using a social account, like Google and Facebook, from the login page
- Allow users to log in once to access external services

My Domain is required before you can use these Salesforce features:

- Single sign-on (SSO) with external identity providers
- Social sign-on with authentication providers, such as Google and Facebook
- Lightning components in Lightning component tabs, Lightning Pages, the Lightning App Builder, or standalone apps
- Watch a Demo (5:11 minutes)

My Domain is also available for sandbox environments.

Note: My Domain is subject to additional Terms of Use.

Your domain name uses standard URL format, including:

- Protocol: https://
- Subdomain prefix: your brand or term
- Domain: my.salesforce.com

Your name can include up to 40 letters, numbers, and hyphens. You can't start the subdomain name with root, status, or a hyphen.

You have the chance to try out names and check availability before you commit to your domain name.

#### My Domain

Salesforce is enabled as an identity provider when a domain is created. After your domain is deployed, you can add or change identity providers and increase security for your org by customizing your domain's login policy.

(1) Important: After you deploy your domain, it's activated immediately, and requests with the original URL are redirected to your new domain. Only Salesforce Customer Support can disable or change your domain name after it's deployed.

# Set Up a My Domain Name

Implementing your subdomain name with My Domain is quick and easy.

- 1. Find a domain name that's available and sign up for it.
- 2. Customize the logo, background color, and right-frame content on your login page.
- 3. Add or change the identity providers available on your login page.
- **4.** Test your domain name and deploy it to your entire org.
- **5.** Set the login policy for users accessing your pages.

#### **EDITIONS**

Available in: both Salesforce Classic and Lightning Experience

Available in: Performance, Unlimited, Enterprise, Developer, Professional, and Group Editions.

#### **USER PERMISSIONS**

To set up a domain name:

"Customize Application"

#### Define Your Domain Name

Register your org's custom domain name with My Domain. You can try out names and check availability before registering the name.

Start setting up your My Domain subdomain by finding a domain name unique to your org and registering it. Choose your name carefully. When you register, Salesforce updates its domain name registries with your domain name. After the name is registered, only Salesforce Customer Support can disable or change your domain name.

- 1. From Setup, enter My Domain in the Quick Find box, then select My Domain.
- 2. Enter the subdomain name you want to use within the sample URL. For example, if a company called Universal Containers uses the subdomain universalcontainers, the company's login URL is https://universalcontainers.my.salesforce.com/. Your name can include up to 40 letters, numbers, and hyphens.

You can't use these reserved words for subdomains:

- www
- salesforce
- heroku

You can't start the domain name with:

- root
- status
- a hyphen (-)
- 3. Click **Check Availability**. If your name is already taken, choose a different one.
- 4. Click Register Domain.
- 5. You receive an email when your domain name is ready for testing. It can take a few minutes.

The new subdomain is available to your users after you test and deploy it.

#### **EDITIONS**

Available in: both Salesforce Classic and Lightning Experience

Available in: Performance, Unlimited, Enterprise, Developer, Professional, and Group Editions.

#### **USER PERMISSIONS**

To define a domain name:

# Customize Your Login Page with Your Brand

Customize the look and feel of your login page by adding a background color, logo, and right-side content. Customizing your login page with your company's branding helps users recognize your page.

- Setting Up a My Domain (Salesforce Classic) (5:10 minutes. Login page branding starts at 2:43.)
- 1. From Setup, enter My Domain in the Quick Find box, then select My Domain.
- 2. Under Authentication Configuration, click Edit.
- **3.** To customize your logo, upload an image. Images can be .jpg, .gif, or .png files up to 100 KB. Maximum image size is 250px by 125px.
- **4.** To customize your login page background, click the or enter a valid hexadecimal color code.
- **5.** To support advanced authentication methods for iOS users, select **Use the native browser for user authentication on iOS**.

This iOS user authentication option is for users of Salesforce1 and Mobile SDK applications on iOS devices. It enables support of authentication methods, such as Kerberos, Windows NT LAN Manager (NTLM), or certificate-based authentication. When you select this option, users on iOS devices are redirected to their native browser when using single sign-on authentication into your custom domain. For other operating systems, Salesforce1 and applications using Mobile SDK version 3.1 or later can support certificate-based authentication when the applications are integrated with Mobile Device Management (MDM) software.

**6.** Enter the URL of the file to be included in the right-side iFrame on the login page.

The content in the right-side iFrame can resize to fill about 50% of the page. Your content must be hosted at a URL that uses SSL encryption and the https:// prefix. To build your own custom right-side iFrame content page using responsive web design, use the My Domain Sample template.

Example: https://c.salesforce.com/login-messages/promos.html

- **7.** Optionally, select authentication services as identity providers on the login page, such as social sign-on providers like Google and Facebook. Users can then log in with their social account credentials. Configure authentication services as Auth. Providers in Setup.
- **8.** Click **Save**.

#### **EDITIONS**

Available in: both Salesforce Classic and Lightning Experience

Available in: Performance, Unlimited, Enterprise, Developer, Professional, and Group Editions.

#### USER PERMISSIONS

To customize a login page:

# Add Identity Providers on a Login Page

Allow users to authenticate using alternate identity provider options right from your login page. If you've enabled single sign-on and configured SAML, or set up external authentication providers as Auth. Providers in Setup, you can provide links to these identity providers on your domain's login page. Users are sent to the identity provider's login screen to authenticate and then redirected back to Salesforce.



**Note**: Available authentication services include all providers configured as SAML single sign-on identify providers or external authentication providers, except Janrain. You can't use Janrain for authentication from the login page.

- 1. From Setup, enter My Domain in the Quick Find box, then select My Domain.
- 2. Under Authentication Configuration, click Edit.
- **3.** Select one or more already configured authentication services as an identity provider.
- 4. Click Save

#### **EDITIONS**

Available in: both Salesforce Classic and Lightning Experience

Available in: Performance, Unlimited, Enterprise, Developer, Professional, and Group Editions.

#### **USER PERMISSIONS**

To add identity providers on a login page:

"Customize Application"

# Set the My Domain Login Policy

Manage your user logins by customizing the login policy for your domain. By default, users log in from a generic Salesforce login page, bypassing the login page specific to your domain. If you don't set a login policy, users can make page requests without your domain name, such as when using old bookmarks.

- 1. From Setup, enter My Domain in the Quick Find box, then select My Domain.
- 2. Under My Domain Settings, click Edit.
- 3. To disable authentication for users who don't use your domain-specific login page, set a login policy. Selecting the login policy prevents users from logging in on the generic https://<instance>.salesforce.com/ login page and then being redirected to your pages after login.
- **4.** Choose a redirect policy.
  - **a.** To allow users to continue using URLs that don't include your domain name, select **Redirect to the same page within the domain**.



**Note:** Bookmarks don't work when the **Redirect to the same page within the domain** option is selected for partner portals. Manually change the existing bookmarks to point to the new domain URL by replacing the Salesforce instance name with your custom domain name. For example, replace

https://na30.salesforce.com/ with

https://yourDomain.my.salesforce.com/ in the bookmark's URL.

#### **EDITIONS**

Available in: both Salesforce Classic and Lightning Experience

Available in: Performance, Unlimited, Enterprise, Developer, Professional, and Group Editions.

#### **USER PERMISSIONS**

To set login policy for a domain:

- **b.** To remind users to use your domain name, select **Redirected with a warning to the same page within the domain**. After reading the warning, users are redirected to the page. Select this option for a few days or weeks to help users transition to a new domain name.
- **c.** To require users to use your domain name when viewing your pages, select **Not redirected**.
- 5. Click Save.

My Domain URL Changes

# My Domain URL Changes

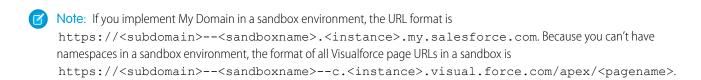
When you set up a subdomain name for your org with My Domain, all your application URLs, including Visualforce pages, also change. Make sure that you update all application URLs before you deploy a domain name. For example, the Email Notification URL field in Chatter Answers continues to send notifications with the old URLs to internal users unless you update it. This table shows you the differences.

<b>URL Type</b>	Old URL	New URL
Login	https://login.salesforce.com	https:// <subdomain>.my. salesforce.com</subdomain>
Application page or tab	https:// <irstance>.salesforce.com/<pageid></pageid></irstance>	<pre>https://<subdomain>.my. salesforce.com/<pageid></pageid></subdomain></pre>
Visualforce page with no namespace	https://c. <nstane>isal.fone.com/qox/qagrane&gt;</nstane>	https:// <subdomain>c. <instance>.visual. force.com/apex/<pagename></pagename></instance></subdomain>
Visualforce page <i>with</i> namespace	https:// <yournamespace101>. <instance>.visual. force.com/apex/<pagename></pagename></instance></yournamespace101>	https:// <subdomain> <yournamespace>. <instance>.visual.force.com /apex/</instance></yournamespace></subdomain>

#### **EDITIONS**

Available in: both Salesforce Classic and Lightning Experience

Available in: Performance, Unlimited, Enterprise, Developer, Professional, and Group Editions.



# Test and Deploy Your New My Domain Subdomain

After you set up your subdomain with My Domain, test it and then roll it out to your users. Testing gives you the chance to explore your subdomain. It also helps you verify URLs for pages before rolling out the subdomain to your users.

- (1) Important: After you deploy your domain, it's activated immediately, and requests with the original URL are redirected to your new domain. Only Salesforce Customer Support can disable or change your domain name after it's deployed.
- 1. Test your domain login. From Setup, enter *My Domain* in the Quick Find box, then select **My Domain**. Or, log out of your DE org and log in to Salesforce using your new subdomain name. Or, click the login link in the activation email you received.
  - You can customize your domain login page and add authentication services (like social sign-on) before you deploy the domain to your users. You can also test the domain in a sandbox environment.
- **2.** Test the new domain name by clicking tabs and links. All pages now show your new domain name.

#### EDITIONS

Available in: both Salesforce Classic and Lightning Experience

Available in: Performance, Unlimited, Enterprise, Developer, Professional, and Group Editions.

#### **USER PERMISSIONS**

To set up a domain name:

If you've customized your Salesforce UI with features, such as custom buttons or Visualforce pages, make sure that you test your customizations thoroughly before deploying your domain name. Look for broken links due to hard-coded references (instance-based URLs), and use your subdomain URLs instead. For more information, enter "hard-coded references" in *Salesforce Help* 

**3.** To roll out the new domain name to your org, from Setup, enter *My Domain* in the Quick Find box, then select **My Domain**. Then click **Deploy to Users** and **OK**.

When you deploy your domain, it's activated immediately, and all users are redirected to pages with new domain addresses. You can now set login policies in the Domain Settings section that appears after you deploy your domain. For example, you can prevent users from logging in from login.salesforce.com.

# Guidelines and Best Practices for Implementing My Domain

These tips smooth the transition to using the subdomain that you created with My Domain.

- Communicate the upcoming change to your users before deploying it.
- Deploy your new subdomain when your org receives minimal traffic, like during a weekend, so you can troubleshoot while traffic is low.
- If you've customized your Salesforce UI with features, such as custom buttons or Visualforce
  pages, make sure that you test your customizations thoroughly before deploying your domain
  name. Look for broken links due to hard-coded references (instance-based URLs), and use your
  subdomain URLs instead. For more information, enter "hard-coded references" in Salesforce
  Help Test them in a sandbox environment first.
- Make sure that you update all application URLs before you deploy a domain name. For example, the Email Notification URL field in Chatter Answers continues to send notifications with the old URLs to internal users unless you update it.
- If your domain is registered but has not yet been deployed, URLs contain your subdomain name when you log in from the My Domain login page. However, links that originate from merge fields that are embedded in emails sent asynchronously, such as workflow emails, still use the old URLs. *After* your domain is deployed, those links show the new My Domain URLs.
- Help your users get started using your new subdomain by providing links to pages they use frequently, such as your login page. Let your users know if you changed the login policy, and encourage them to update their bookmarks the first time they're redirected.
- Choose the Redirect Policy option **Redirected with a warning to the same page within the domain** to give users time to update their bookmarks with the new subdomain name. After a few days or weeks, change the policy to **Not redirected**. This option requires users to use your subdomain name when viewing your pages. It provides the greatest level of security.
- Only use **Prevent login from https://login.salesforce.com** if you're concerned that users who aren't aware of your subdomain try to use it. Otherwise, leave the option available to your users while they get used to the new domain name.
- Bookmarks don't work when the **Redirect to the same page within the domain** option is selected for partner portals. Manually change the existing bookmarks to point to the new domain URL by replacing the Salesforce instance name with your custom domain name. For example, replace https://na30.salesforce.com/ with https://yourDomain.my.salesforce.com/ in the bookmark's URL.
- If you block application page requests that don't use the new Salesforce subdomain URLs, let your users know that they must either update old bookmarks or create new ones for the login page. They must also update tabs or links within the app. If you change your login redirect policy to **Not Redirected**, users must use the new subdomain URLs immediately.
- If you are using My Domain, you can identify which users are logging in with the new login URL and when. From Setup, enter Login History in the Quick Find box, then select **Login History** and view the Username and Login URL columns.
- On the login.salesforce.com page, users can click **Log in to a custom domain** to enter your subdomain name and log in. In this case, they must know the subdomain name. As a safeguard, give them a direct link to your subdomain's login page as well.

#### **EDITIONS**

Available in: both Salesforce Classic and Lightning Experience

Available in: Performance, Unlimited, Enterprise, Developer, Professional, and Group Editions.

Do the Following	
Check to see if the API client is directly referencing the server endpoint. The API client should use the LoginResult.serverURL value returned by the login request, instead of using a hard-coded server URL.	
After your subdomain is deployed, Salesforce returns the server URL containing your domain. Redirect policy settings have no effect on API calls. That is, old calls to instance URLs continue to work. However, the best practice is to use the value returned by Salesforce.	
Replace references to the org's instance URL with your subdomain.	
Replace references to the org's instance URL with your subdomain. See How to find hard-coded references with the Force.com IDE.	
Tell your users to update any bookmarks in the left navigation of their Chatter groups.	
Manually update the email notification URL.	
To update the URL, clear the existing URL so that the field is blank and save the page. Then the system populates the field with your new My Domain URL.	

# Get System Performance and Maintenance Information with My Domain

You can get information about system performance and availability from trust.salesforce.com. Trust reports status information based on your org instance. If you're using My Domain and don't know your org instance, you can look it up.

Here's how to get status information using your domain name.

- **1.** Go to trust.salesforce.com.
- 2. Under System Status, click Learn More.
- **3.** Under status.salesforce.com, click **Status**.

  The Status & Maintenance page shows the status for each org instance.
- **4.** At the top right of the page, click **My Domain**.
- 5. Enter your domain name in the search bar to get your org instance.
  Don't enter the complete URL. For example, use yourDomain, not https://yourDomain.my.salesforce.com/.
- 6. Under Status & Maintenance, select All, and look for your instance.

#### **EDITIONS**

Available in: both Salesforce Classic and Lightning Experience

Available in: Performance, Unlimited, Enterprise, Developer, Professional, and Group Editions.

#### **USER PERMISSIONS**

To set up a domain name:

# **CHAPTER 5** Configure and Use the App Launcher

#### In this chapter ...

- Enable the App Launcher with a Profile in Salesforce Classic
- Enable the App Launcher with a Permission Set in Salesforce Classic
- Set the Default Sort Order for Apps
- Make the App Launcher the Default Landing Page

Users are presented with tiles that link to their connected apps, Salesforce apps, and on-premise applications. Salesforce admins can set the default app order for an org and determine which apps are available to which users. They can make the App Launcher the default landing page when users first open Salesforce.

All Lightning Experience users get the App Launcher.

Salesforce Classic users need the "Use Identity Features" permission and the App Launcher option in their profile set to **Visible**. Users see only the apps that they are authorized to see according to their profile or permission sets.

In Salesforce Classic, Salesforce admins using the System Administrator profile have access to the App Launcher. Admins using profiles cloned from the System Administrator profile don't.

Note: Setting up the App Launcher (5:39 minutes)

See how to set up, use, and manage the App Launcher.

The App Launcher is particularly useful for managing access to connected apps, as shown in Quick Start: Set up your own domain, add a Connected App and use the App Launcher. And, you can use the AppMenuItem API for programmatic control over the apps in the App Launcher.

# Enable the App Launcher with a Profile in Salesforce Classic

Create a profile and assign it to users, so they can access the App Launcher.

Ø

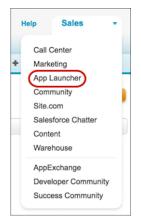
**Note:** These steps work in Salesforce Classic. If you see the App Launcher icon ( ::: ) on the left side of the navigation bar at the top of your screen, you're in Lightning Experience. If not, you're in Salesforce Classic.

In Salesforce Classic, Salesforce admins using the System Administrator profile have access to the App Launcher. Admins using profiles cloned from the System Administrator profile don't.

- 1. From Setup, enter *Profiles* in the Quick Find box, then select **Profiles**.
- 2. Click New Profile.
- **3.** Select an Existing Profile as a basis for the new profile. For example, select **Standard User**.
- Enter the name of the new profile.
   For example, Standard User Identity.
- 5. Click Save.
- **6.** In the detail page for the new profile, click **Edit**.
- 7. In Custom App Settings, set the App Launcher to **Visible**, if it isn't already.

  Under Tab Settings, verify that the App Launcher tab is set to Default On.
- **8.** Under Administrative Permissions, select **Use Identity Features**.
- 9. Click Save.
- 10. From Setup, enter Users in the Quick Find box, then select Users.
- 11. Click Edit next to each user you want to access the App Launcher.
- 12. In the user's Profile field, select the new profile that has "Use Identity Features" enabled.
  For example, you might use the Standard User Identity profile.
- 13. Click Save.

When you log in as the selected user, the App Launcher appears in the drop-down app menu.



#### **EDITIONS**

Available in: Salesforce Classic

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

# Enable the App Launcher with a Permission Set in Salesforce Classic

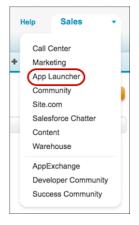
Create a permission set and assign it to users, so they can access the App Launcher.



**Note**: These steps work in Salesforce Classic. If you see the App Launcher icon ( ::: ) on the left side of the navigation bar at the top of your screen, you're in Lightning Experience. If not, you're in Salesforce Classic.

- From Setup, enter Permission Sets in the Quick Find box, then select Permission Sets.
- 2. Click New.
- **3.** Enter a Label for the new permission set. For example, *Identity Features*.
- **4.** Optionally, restrict the use of this permission set to a specific User License.
- 5. Click Save.
- **6.** Click **System Permissions**.
- 7. Click Edit.
- 8. Select Use Identity Features.
- 9. Click Save.
- 10. From Setup, enter *Users* in the Quick Find box, then select **Users**.
- **11.** Click the name of an existing user to whom you want to give access to the App Launcher.
- **12.** In the **Permission Set Assignments** related list, click **Edit Assignments**.
- **13.** Add the new permission set you created for identity features to Enabled Permission Sets.
- 14. Click Save.

When you log in as the selected user, the App Launcher appears in the drop-down app menu.





Note: Still not seeing the App Launcher? In the profile associated with the user, select **Visible** for the App Launcher setting.

#### **EDITIONS**

Available in: Salesforce Classic

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

# Set the Default Sort Order for Apps

As a Salesforce admin, you control the default sort order of the Salesforce standard, custom, and connected apps that your users see in your org. Users can then rearrange their apps on the App Launcher to get their liking. You can also hide apps so that they don't show in the App Launcher.

Apps include Salesforce standard apps, such as the Salesforce Marketing app, the Service app, and any custom apps that you created for your org. Connected apps are third-party apps, such as Gmail, Google Drive, and Microsoft Office 365, that you install to make it easy for your users to get their work done.

#### IN THIS SECTION:

#### Reorder the App Menu and App Launcher in Salesforce Classic

You can change the order in which apps appear in the app menu and App Launcher. The app menu is a drop-down list in the upper-right corner of every page in Salesforce Classic. If enabled, the App Launcher is listed in the drop-down menu. Apps in the App Launcher appear as large tiles and link to Salesforce standard apps, custom apps, and connected apps.

#### Reorder the App Launcher Apps in Lightning Experience

As a Salesforce admin, you can change your org's default visibility and the order in which apps appear in the Lightning Experience App Launcher. Users can then reorder their personal view of the App Launcher to their liking.

# Reorder the App Menu and App Launcher in Salesforce Classic

You can change the order in which apps appear in the app menu and App Launcher. The app menu is a drop-down list in the upper-right corner of every page in Salesforce Classic. If enabled, the App Launcher is listed in the drop-down menu. Apps in the App Launcher appear as large tiles and link to Salesforce standard apps, custom apps, and connected apps.

- 1. From Setup, enter App Menu in the Quick Find box, then select App Menu.
- **2.** From the list of app menu items, drag the apps to change their order. Changes take effect immediately.
- **3.** Optionally, click **Visible in App Launcher** or **Hidden in App Launcher** to show or hide individual apps from the App Launcher for all users in the org.

The app menu lists all apps installed in the org. However, the apps that users see in their App Launcher vary. Salesforce admins control each app's visibility settings and users' permissions.

#### **EDITIONS**

Available in: both Lightning Experience and Salesforce Classic

Available in: Contact Manager, Group, Professional, Enterprise, Performance, Unlimited, and Developer Editions

#### EDITIONS

Available in: Salesforce Classic

Available in: Contact Manager, Group, Professional, Enterprise, Performance, Unlimited, and Developer Editions

#### USER PERMISSIONS

#### To view apps:

 "View Setup and Configuration"

#### To manage apps:

# Reorder the App Launcher Apps in Lightning Experience

As a Salesforce admin, you can change your org's default visibility and the order in which apps appear in the Lightning Experience App Launcher. Users can then reorder their personal view of the App Launcher to their liking.

The App Launcher displays a user's available Salesforce apps and the connected apps that a Salesforce admin installs for the org.

- 1. From Setup, enter App Menu in the Quick Find box, then select App Menu.
- **2.** From the list of app menu items, drag the apps to change their order. Changes take effect immediately.
- **3.** Optionally, click **Visible in App Launcher** or **Hidden in App Launcher** to show or hide individual apps from the App Launcher for all users in the org.

All apps installed in the org appear on the app menu items list. However, the apps that users see in their app menu and App Launcher vary depending on each app's visibility settings and the user's permissions. Users see only the apps that they are authorized to see according to their profile or permission sets.

For connected apps and service providers to appear in the App Launcher, specify their start URL in the App Manager.

#### **EDITIONS**

Available in: Lightning Experience

Available in: Contact Manager, Group, Professional, Enterprise, Performance, Unlimited, and Developer Editions

#### **USER PERMISSIONS**

To view apps:

 "View Setup and Configuration"

To manage apps:

"Customize Application"

# Make the App Launcher the Default Landing Page

Make it easy for your Salesforce Identity users to access what they need by presenting the redesigned App Launcher as the default landing page when they log in to Salesforce.

- Note: These steps work in Lightning Experience. If you see the App Launcher icon ( ::: ) on the left side of the navigation bar at the top of your screen, you're in Lightning Experience. If not, you're in Salesforce Classic.
- 1. From Setup, enter App Manager in the Quick Find box, then select App Manager.
- 2. Click **New Lightning App** and walk through the New Lightning App wizard. Add only the App Launcher tab to Selected Items.
- 3. Make the App Launcher the default when users log in for the first time.
  - **a.** From Setup, enter *Profiles* in the Quick Find box, then select **Profiles**.
  - **b.** Select a profile and scroll to the Custom App Settings section.
  - **c.** Select **Default** next to the Lightning app.
- 4. Log out and log in again.

The new Lightning app appears in the navigation bar and App Launcher.

#### **EDITIONS**

Available in: both Salesforce Classic and Lightning Experience

Available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

# **CHAPTER 6** Set Up Single Sign-On to Google Apps

#### In this chapter ...

- Get a Salesforce Identity Provider Certificate
- Set Google
   Administrator Single
   Sign-On Options
- Create a Connected App for GMail

Give your Salesforce organization users single sign-on access to Google Apps, such as Google Drive, GMail, and GCal.

Since Google Apps uses SAML for single sign-on, you can set up your organization to launch Google Apps from your Salesforce App Launcher without having to log in, separately, to Google. This process is similar to the one in the quick start, and can give your Salesforce organization users single sign-on access to Google apps like Google Drive, GMail, and GCal. To set up Google Apps in your organization, you need:

- 1. A custom domain (My Domain).
- 2. Google Apps administrator account with access to your Google Admin console.
- **3.** A profile or permission set with "Use Identity Features" enabled.

For steps to set up your own custom domain, see Quick Start: Set up your own domain, add a Connected App and use the App Launcher. For steps to set up a profile or permission set with "Use Identity Features" enabled, see Configure and Use the App Launcher.

Learn how to use SAML and single sign-on to launch Google Apps from your Salesforce App Launcher.

# Get a Salesforce Identity Provider Certificate

Download and save an identity provider certificate.

Follow these steps in your Salesforce organization.

From Setup, enter Identity Provider in the Quick Find box, then select Identity
Provider.

You get the certificate for signing SAML assertions in the Identity Provider Setup section. Optionally, you can change the self-signed certificate to a production certificate issued by a signing authority. For more information about certificates, see "Creating Certificates and Key Pairs" in the online help.

#### 2. Click Download Certificate.

The certificate validates signatures, and you need to upload it to your Google Administrator account. Remember where you save it.

#### **EDITIONS**

Available in: both Salesforce Classic and Lightning Experience

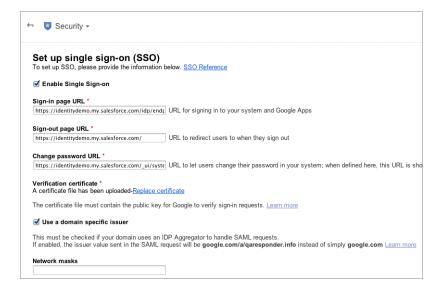
Available in: **Developer**, **Enterprise**, **Performance**, **Unlimited**, and **Database.com** Editions

# Set Google Administrator Single Sign-On Options

In your Google Administrator account, set the values for single sign-on.

You need to sign in as an Administrator to the Google Apps account at https://admin.google.com.

- 1. In your Google Administrator account, click More Controls > Security > Advanced Settings > Set up single sign-on (SSO)
- 2. Enter the following values.
  - **a.** Sign-in page URL: https://yourdomain.my.salesforce.com/idp/endpoint/HttpRedirect Replace yourdomain with your custom domain name.
  - b. Sign-out page URL: https://yourdomain.my.salesforce.com Replace yourdomain with your custom domain name.
  - c. Change password URL: https://yourdomain.my.salesforce.com/\_ui/system/security/ChangePassword Replace yourdomain with your custom domain name.
  - **d.** Verification certificate: upload the identity provider certificate file you saved in Get a Salesforce Identity Provider Certificate.
  - e. Select Use a domain specific issuer.



#### 3. Click Save changes.

# Create a Connected App for GMail

These steps show you how to set up a GMail connected app.

Follow these steps in your Salesforce organization.

- 1. From Setup, enter Apps in the Quick Find box, then select Apps.
- 2. In the Connected Apps section, click New.
- 3. In the **Basic Information** section, enter the following values.
  - a. Connected App Name: GMail.
  - **b.** Contact Email: your administrator Email address.
  - c. Logo Image URL: Select Choose one of our sample logos, find the logo you want, and click on it. Then, copy the Logo URL. Paste the value back in the Logo Image URL field. Or, enter your own URL.
- 4. In the Web App Settings section, enter the following values.
  - a. Start URL: https://gmail.google.com.
  - b. Select Enable SAML.
  - c. Entity ld: Enter google.com/a/yourGoogleAppDomainName.
    Replace yourGoogleAppDomainName with your actual Google domain name.
  - **d.** ACS URL: The same as Entity Id with the "https" prefix and the "acs" suffix, such as https://google.com/a/yourGoogleAppDomainName/acs
  - **e.** Subject Type: Select how the user is identified.

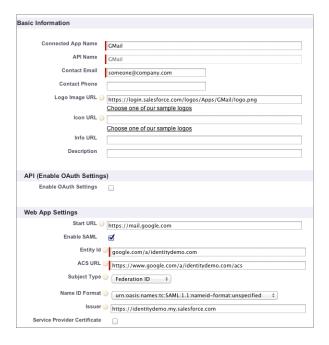
    This field should contain the Google Apps Email address for the user.

Leave the other fields as is, unless you know you need to change the configuration.

### **EDITIONS**

Available in: both Salesforce Classic and Lightning Experience

Available in: **Developer**, **Enterprise**, **Performance**, **Unlimited**, and **Database.com** Editions



- 5. Click Save.
- **6.** From Setup, enter "Connected Apps" in the Quick Find box, then select the option for managing connected apps.
- 7. Click on the name of the connected app, which is "GMail" in this case.
- 8. Copy the IdP-Initiated Login URL value.
- 9. Click Edit.
- 10. In the Start URL field, paste the the following string the value from the IdP-Initiated Login URL field, and add the following:

The value copied from IdP-Initiated Login URL field +

&RelayState=http%3A%2F%2Fmail.google.com%2Fa%2FyourGoogleAppDomainName

Replace yourGoogleAppDomainName with your actual Google domain. You should have a value similar to this one:

https://identitydemo.my.salesforce.com/idp/login?app=0sp30000000000k &RelayState=http%3A%2F%2Fmail.google.com%2Fa%2Fidentitydemo.com

#### 11. Click Save.

Now you can add this connected app to a profile or permission set. When that profile or permission set is applied to a user, the user will be able to use the GMail connected app. You can follow the same basic process to install other Google Apps.

# CHAPTER 7 Set Two-Factor Authentication Login Requirements

As a Salesforce admin, you can require your users to use a second factor of authentication when they log in.

You can require two-factor authentication each time a user logs in with a username and password to Salesforce, including orgs with custom domains created using My Domain. To set the requirement, select the "Two-Factor Authentication for User Interface Logins" permission in the user profile (for cloned profiles only) or permission set.

See how to set up a two-factor authentication requirement for your org and how your users can use the Salesforce Authenticator app. Salesforce Authenticator: Set Up a Two-Factor Authentication Requirement (Salesforce Classic)



#### Walk Through It: Secure Logins with Two-Factor Authentication

Users with the "Two-Factor Authentication for User Interface Logins" permission have to provide a second factor, such as a mobile authenticator app or U2F security key, each time they log in to Salesforce.

You can also use a profile-based policy to set a two-factor authentication requirement for users assigned to a particular profile. Use the profile policy when you want to require two-factor authentication for users of the following authentication methods:

- SAML for single sign-on
- Social sign-on in to Salesforce orgs or Communities
- Username and password authentication into Communities

All Salesforce user interface authentication methods, including username and password, delegated authentication, SAML single sign-on, and social sign-on through an authentication provider, are supported. In the user profile, set the Session security level required at login field to **High Assurance**. Then set session security levels in your org's session settings to apply the policy for particular login methods. Also in your org's session settings, check the session security levels to make sure that Two-Factor Authentication is in the High Assurance column.



Warning: If Two-Factor Authentication is in the Standard column, users get an error when they log in with a method that grants standard-level security.

#### IN THIS SECTION:

#### Verify Your Identity with a One-Time Password Generator App or Device

Connect a one-time password generator app, such as Salesforce Authenticator or Google Authenticator, to verify your identity. The app generates a verification code, sometimes called a "time-based one-time password".

#### **EDITIONS**

Available in: Both Salesforce Classic and Lightning Experience

Available in: Contact Manager, Group, Professional, Enterprise, Performance, Unlimited, and Developer Editions

#### **USER PERMISSIONS**

To edit profiles and permission sets:

"Manage Profiles and Permission Sets"

# Verify Your Identity with a One-Time Password Generator App or Device

Connect a one-time password generator app, such as Salesforce Authenticator or Google Authenticator, to verify your identity. The app generates a verification code, sometimes called a "time-based one-time password".

If your company requires two-factor authentication for increased security when you log in, access connected apps, reports, or dashboards, use a code from the app. If you're required to use two-factor authentication before you have an app connected, you're prompted to connect one the next time you log in to Salesforce.

#### **EDITIONS**

Available in: Both Salesforce Classic and Lightning Experience

Available in all editions

- 1. Download the supported authenticator app for your device type. You can use any authenticator app that supports the time-based one-time password (TOTP) algorithm (IETF RFC 6238), such as Salesforce Authenticator for iOS, Salesforce Authenticator for Android, or Google Authenticator.
- 2. From your personal settings, enter *Advanced User Details* in the Quick Find box, then select **Advanced User Details**. No results? Enter *Personal Information* in the Quick Find box, then select **Personal Information**.
- 3. Find App Registration: One-Time Password Generator and click **Connect**.

  If you're connecting an authenticator app other than Salesforce Authenticator, use this setting. If you're connecting Salesforce Authenticator, use this setting if you're only using its one-time password generator feature (not the push notifications available in version 2 or later).
  - Note: If you're connecting Salesforce Authenticator so that you can use push notifications, use the App Registration: Salesforce Authenticator setting instead. That setting enables both push notifications and one-time password generation.

You can connect up to two authenticator apps to your Salesforce account for one-time password generation: Salesforce Authenticator and one other authenticator app.

- **4.** For security purposes, you're prompted to log in to your account.
- 5. Using the authenticator app on your mobile device, scan the QR code.
  Alternatively, click I Can't Scan the QR Code in your browser. The browser displays a security key. In the authenticator app, enter your username and the key displayed.
- **6.** In Salesforce, enter the code generated by the authenticator app in the Verification Code field. The authenticator app generates a new verification code periodically. Enter the current code.

#### 7. Click Connect.

To help keep your account secure, we send you an email notification whenever a new identity verification method is added to your Salesforce account. You get the email whether you add the method or your Salesforce admin adds it on your behalf.

SEE ALSO:

Salesforce Help: Personalize Your Salesforce Experience

# **CHAPTER 8** Customize Your Login Page with Your Own Branding

Change the look and feel of your custom domain login page by adding a background color, logo, and right-side iFrame content.

Before you can change the appearance of your login page, you must set up a domain using My Domain. For more information, see Quick Start: Set up your own domain, add a Connected App and use the App Launcher on page 5.

A custom login page can match your company's branding, give users extra information, and identify your organization.

Note: Setting Up a My Domain (5:10 minutes. Login page branding starts at 2:43.) See how to use My Domain to customize your users' login experience.

- 1. From Setup, enter My Domain in the Quick Find box, then select My Domain.
- 2. Under Authentication Configuration, click Edit.
- **3.** To customize your logo, upload an image. Images can be .jpg, .gif, or .png files up to 100 KB. Maximum image size is 250px by 125px.
- To customize your login page background, click the 📕 or enter a valid hexadecimal color code.
- 5. To support advanced authentication methods for iOS users, select **Use the native browser for user authentication on iOS**. This iOS user authentication option is for users of Salesforce1 and Mobile SDK applications on iOS devices. It enables support of authentication methods, such as Kerberos, Windows NT LAN Manager (NTLM), or certificate-based authentication. When you select this option, users on iOS devices are redirected to their native browser when using single sign-on authentication into your custom domain. For other operating systems, Salesforce 1 and applications using Mobile SDK version 3.1 or later can support certificate-based authentication when the applications are integrated with Mobile Device Management (MDM) software.
- **6.** Enter the URL of the file to be included in the right-side iFrame on the login page.

The content in the right-side iFrame can resize to fill about 50% of the page. Your content must be hosted at a URL that uses SSL encryption and the https:// prefix. To build your own custom right-side iFrame content page using responsive web design, use the My Domain Sample template.

Example: https://c.salesforce.com/login-messages/promos.html

- 7. Optionally, select authentication services as identity providers on the login page, such as social sign-on providers like Google and Facebook. Users can then log in with their social account credentials. Configure authentication services as Auth. Providers in Setup.
- 8. Click Save.
- Example: For example, you can add https://sfdclogin.herokuapp.com/news.jsp as the Right Frame URL.

#### **EDITIONS**

Available in: both Salesforce Classic and Lightning Experience

Available in: Performance, Unlimited, Enterprise, Developer, Professional, and **Group** Editions.

# Synchronize your Salesforce and Active **CHAPTER 9** Directory Users with Identity Connect

#### In this chapter ...

- **Identity Connect**
- **Installing Identity** Connect

Use Identity Connect to upload and synchronize user data from Active Directory to your Salesforce organization.

Once installed and set up, Identity Connect provides an administration console for managing and synchronizing users. You can set up single sign-on using Integrated Windows Authentication (IWA) and Kerberos so users who sign into their desktop environment can use Salesforce without having to log in, separately.

To test Identity Connect, sign up for a Force.com trial organization. For information on the differences between a Developer Edition organization and the Force.com trial organization, see this FAQ.



Example:



Note: Integrating Active Directory with Salesforce using Identity Connect (6:43 minutes)

Learn how to download and install Identity Connect to synchronize your Active Directory users with your Salesforce users.

# **Identity Connect**

Identity Connect integrates Microsoft Active Directory with Salesforce via a service that runs on either Windows or Linux platforms. It gives AD users single sign-on access to Salesforce. When syncing AD users, the identity service provider can be either Salesforce or Identity Connect.

#### **EDITIONS**

Available in: both Salesforce Classic and Lightning Experience

Available for an additional cost in: **Enterprise**, **Performance**, and **Unlimited** Editions. **Developer** Edition includes 10 Identity Connect permission set licenses.

# Installing Identity Connect

Your organization must have at least one Identity Connect license. To obtain Identity Connect, contact Salesforce.

The Identity Connect software will typically be installed on a server by your IT department. Each user does not need to install Identity Connect individually.

- From Setup, enter Identity Connect in the Quick Find box, then select Identity Connect.
  - Note: **Identity Connect** doesn't appear in Setup until Salesforce adds the feature to your organization.
- 2. Click the download link that corresponds to your operating system.
- **3.** Install the software according to the Salesforce Identity Connect Implementation Guide.

#### **EDITIONS**

Available in: both Salesforce Classic and Lightning Experience

Available for an additional cost in: **Enterprise**, **Performance**, and **Unlimited** Editions. **Developer** Edition includes 10 Identity Connect permission set licenses.

#### **USER PERMISSIONS**

To install Identity Connect:

"Manage Users"

# CHAPTER 10 Tutorial: Test Single Sign-On from an External Identity Provider

#### In this chapter ...

- Establish a Federation ID
- Set up your identity provider
- Generate SAML
- Troubleshoot SAML assertions

This tutorial introduces single sign-on (SSO) implementation from a third-party identity provider and shows you how to troubleshoot SAML assertions from that provider.

Salesforce supports SSO from third-party identity providers. For SSO to work, you need an identity provider and a service provider to coordinate authentication and authorization information using SAML assertions. Follow these steps to test setting up SSO from an external identity provider and troubleshooting SAML assertions. At the end of this tutorial, you'll able to log in to your Salesforce org from an external app.



See how to authenticate users using an external service.

#### Establish a Federation ID

For this single sign-on implementation, we'll set a user attribute that links the user between their Salesforce organization and an external application.

- 1. From Setup, enter Users in the Quick Find box, then select Users.
- 2. Click Edit next to your current user.
- 3. In the Single Sign On Information section, enter the Federation ID: admin@universalcontainers.com.

  For this example, we arbitrarily made up a Federation ID. The Federation ID is a unique username for each user that can be shared across multiple applications. Sometimes this is the employee ID for that user. The important part of the Federation ID is that it is not duplicated for more than one user within a single Salesforce organization (you can have the same Federation ID for the same user
- 4. Click Save.

# Set up your identity provider

in more than one Salesforce organization).

You'll use Axiom, a single sign-on testing app hosted on Heroku, to go through the steps of setting up an identity provider.

Get an identity provider certificate from the Axiom app and set it up in your Salesforce organization.

- ? Tip: Keep the Axiom app open in one browser window, and your DE organization open in another browser window so you can cut-and-paste between the two, easily.
- 1. In a new browser window, go to http://axiomsso.herokuapp.com.
- 2. Click SAML Identity Provider & Tester.
- 3. Click Download the Identity Provider Certificate.

The certificate validates signatures, and you need to upload it to your Salesforce organization. Remember where you save it.

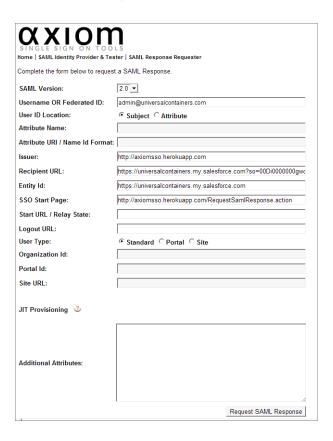
- **4.** In your Salesforce organization, from Setup, enter *Single Sign-On Settings* in the Quick Find box, then select **Single Sign-On Settings**.
- 5. Click Edit.
- 6. Select SAML Enabled.
- 7. Click Save.
- 8. In SAML Single Sign-On Settings, click New.
- 9. Enter the following values.
  - a. Name: Axiom Test App
  - **b.** Issuer: http://axiomsso.herokuapp.com
  - **c.** Identity Provider Certificate: Choose the file you downloaded in step 3.
  - **d.** Request Signing Certificate: Select a certificate. If no certificate is available, leave as Generate self-signed certificate.
  - e. SAML Identity Type: Select Assertion contains the Federation ID from the User object.
  - f. SAML Identity Location: Select Identity is in the NameIdentifier element of the Subject statement.
  - g. Service Provider Initiated Request Binding: Select HTTP Redirect.

- **h.** Entity ld: Enter your My Domain name including "https", such as https://universalcontainers.my.salesforce.com
- **10.** Click **Save** and leave the browser page open.

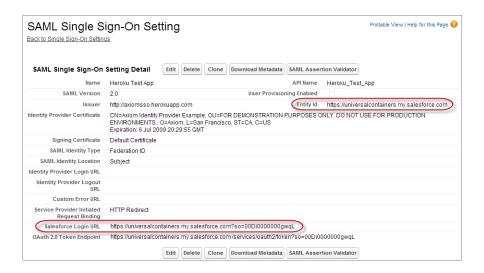
#### Generate SAML

Axiom generates a SAML assertion to log in to your Salesforce organization with the assigned Federation ID.

- Tip: Keep the Axiom app open in one browser window, and your DE organization open in another browser window so you can cut-and-paste between the two, easily.
- 1. Return to Axiom at http://axiomsso.herokuapp.com.
- 2. Click generate a SAML response.
- 3. Enter the following values (other fields can be left blank).



- **a.** SAML 2.0
- **b.** Username or Federated ID: admin@universalcontainers.com
- **c.** Issuer: http://axiomsso.herokuapp.com
- d. Recipient URL: Get that from the Salesforce SAML Single Sign-On Setting page. (If you didn't keep that page open, from Setup, enter Single Sign-On Settings in the Quick Find box, then select Single Sign-On Settings, and then click Axiom Test App.) Use the Salesforce Login URL value.



- **e.** Entity ID: Get that from the Salesforce **SAML Single Sign on Setting page**, too.
- **4.** Back in Axiom, click **Request SAMLResponse**. Axiom generates the SAML assertion.
- 5. Click Login.

The Axiom application logs in to your Salesforce organization as the user with the assigned Federation ID.

#### Troubleshoot SAML assertions

Use the Salesforce SAML Validator to test and fix a SAML assertion.

If you follow the quick start steps, and do not log in to your organization through the Axiom app, you can use the Salesforce SAML Validator to troubleshoot the SAML assertion. Keep the Axiom app open in a browser window while you troubleshoot the SAML assertion. If you need to reopen Axiom, go to http://axiomsso.herokuapp.com.

- 1. In your Salesforce organization, from Setup, enter <code>Single Sign-On Settings</code> in the <code>Quick Find</code> box, then select <code>Single Sign-On Settings</code>.
- 2. Click SAML Assertion Validator.

The SAML Validator shows the last recorded SAML login failure with some details as to why it failed.

- 3. To test the SAML assertion from the Axiom app, copy the **Formatted SAML Response** from the Axiom app.
- **4.** In the Salesforce SAML Validator, paste the SAML assertion in the **SAML Response** box at the bottom of the page.
- 5. Click Validate.

The page displays some results to help you troubleshoot the assertion. For example, if the assertion was generated a while before it was used to log in, the timestamp expires and the login isn't valid. In that case, regenerate the SAML assertion and try again.

# **CHAPTER 11** Monitor Applications and Run Reports

#### In this chapter ...

- Monitor Usage for Connected Apps
- Create an Identity
   Users Report

Monitor connected apps and set up reports to keep track of app usage by user, app, time, or other values.

Once you've set up connected apps for your Identity users, you can monitor the usage of connected apps throughout your organization, find out how often the apps are used, drill-down into the app details to make changes to the connected app settings, and block or unblock specific apps as your security needs change.

# Monitor Usage for Connected Apps

Administrators can monitor installed connected app usage in the **Connected Apps OAuth Usage** page of their organization.

To view information about OAuth connected apps, from Setup, enter <code>OAuth</code> in the <code>Quick Find</code> box, then select **Connected Apps OAuth Usage**. The resulting list of apps can be long because it contains all Salesforce and custom OAuth apps available to your users, not just the ones installed in your org. For example, it lists apps from AppExchange, Salesforce partners and other developers.

#### **Connected App**

Name of the connected app. The list contains only the apps that anyone in the org is using.

#### Description

Description of the connected app.

#### **Manage App Policies**

Click **Manage App Policies** to open the detail page for the connected app. From the detail page, you can click **Edit Policies** to manage the app's access and security policies.

#### **User Count**

Number of users who are using the app. Click a User Count number to open the Connected App User's Usage page to see information about users, including:

- When they first used the app
- Most recent time they used the app
- Total number of times they used the app

From this page, you can end a user's access to the current session by clicking **Revoke**. Or, you can click **Revoke All** at the top of the page to log out everyone currently using the app.

#### Action

You can perform one of the following actions.

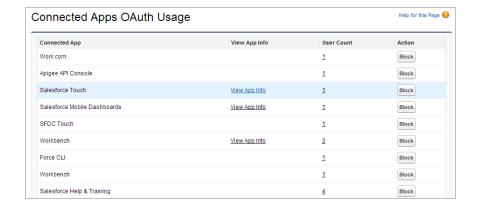
- **Install**—Make the OAuth connected app available for access and security policy management. When you click install, the Manage App Policies link appears next to the app. Click the link to open the app's detail page where you can set policies. Install appears next to apps that were created in another org but not made available by Salesforce or a managed package. Install these apps to manage their security policies in your org.
- **Uninstall**—Remove the local copy of the OAuth connected app. Click uninstall only when the original developer deletes the app in the other Salesforce org. Uninstall doesn't remove the connected app. It just removes the local copy that you installed to set the app's OAuth policies in your org. By uninstalling the app, you're only removing the OAuth policies that you set for the app in your org. You're actually loosening your security measures.
- **Block**—Make the OAuth connected app inaccessible to your org's users. Blocking an app ends all current user sessions and blocks all new sessions.
- **Unblock**—Stop preventing new connections from being established. It allows users to log in and access the app at another time.



#### **EDITIONS**

Available in: Salesforce Classic

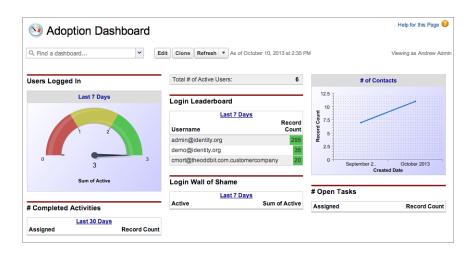
Available in: Enterprise,
Performance, Unlimited,
Developer, and
Database.com Editions



# Create an Identity Users Report

Salesforce maintains Identity Event Logs administrators can use to create reports and dashboards that drill-down into specific information about single sign-on and connected app usage.

The following steps set up a report for Identity users. Use the same steps to set up more than one variation of the same report type, or even create a dashboard for the report.



# EDITIONS

Available in: Salesforce Classic

Available in: Enterprise, Performance, Unlimited, Developer, and Database.com Editions

For more information on dashboards, see "Get Started with Dashboards" in the Salesforce online help.



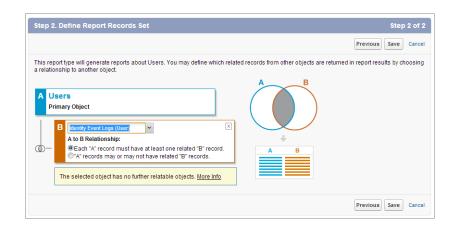
Note: Single Sign-On and Access Management for Mobile Applications (13:17 minutes)

Learn how to create reports for monitoring mobile Identity users and usage. First, this video covers creating and deploying mobile connected apps. Then, it shows how to set up reporting for connected apps usage.

#### Establish a new report type

- 1. From Setup, enter Report Types in the Quick Find box, then select Report Types.
- 2. Click New Custom Report Type.
- 3. Enter the following values.
  - a. Primary Object: Users
  - **b.** Report Type Label: A unique label, such as *Identity Users*

- **c.** Report Type Name: This field automatically uses the label; change it if you want a different name.
- **d.** Description: Give it a useful description others might see.
- e. Store in Category: Pick a category for this report, such as **Administrative Reports**.
- f. Deployment Status: Keep as In Development until you're ready to deploy this report for other users to see.
- 4. Click Next.
- 5. Select Click to relate to another object.
- 6. Select Identity Event Logs (Users).



#### 7. Click Save.

#### Create the report

- 1. Click the **Reports** tab.
- 2. Click New Report....
- **3.** In **Administrative Reports**, select **Identity Users**.
- 4. Click Create.
- 5. Drag-and-drop fields onto the report, as desired.

For example, some useful fields for this report are *Username*, *User ID*, *App: Connected App Name*, *Timestamp* and *Usage Type*.

- 6. Click Save.
- 7. Give the report a name, such as Identity Connected App Usage.
- **8.** Click **Save** (or **Save and Run Report** to see the results, immediately).

# CHAPTER 12 Use External Identities to Extend Your Organization to New Users

External Identity is a type of Salesforce license that provides Identity and Access Management service for customers and partners. This license can be upgraded to Customer Community or Partner Community licenses.

The External Identity license gives you the flexibility to add users to your community site without using Customer Community licenses. The External Identity license adds users at a lower cost than the Customer Community license, but without access to community critical features like Cases or Knowledge. Store and manage these users, authenticate them through username and password, single sign-on, and social sign-on (using identities from Facebook, Google+, LinkedIn, and other authentication providers). Allow user self-registration for efficient provisioning of new users. These users are typically consumers for your business, partners, dealers, patients, and other customers.

This table shows which features are available to users with an External Identity license and a Customer Community license.

Feature	<b>External Identity</b>	<b>Customer Community</b>
Accounts	<b>✓</b>	~
	Read and Edit	Read and Edit
Assets	~	<b>✓</b>
	Read, Create, Edit	Read, Create, Edit
Chatter	<b>✓</b>	<b>✓</b>
Contacts	<b>✓</b>	~
	Read, Create, Edit	
Identity	~	~
Cases		~
		Can create and manage their
		own cases
Products		~
		Read only
Orders		<u>~</u>
Files	~	~
Chatter Answers		<u>~</u>
Ideas		<b>✓</b>

#### **EDITIONS**

Available in: Salesforce Classic

External Identity licenses are available in: **Enterprise**, **Performance**, **Unlimited**, and **Developer** Editions

#### **USER PERMISSIONS**

To assign and manage External Identity users:

"Manage Users"

To enable Communities:

# Use External Identities to Extend Your Organization to New Users

Feature	External Identity	<b>Customer Community</b>
Knowledge		<b>✓</b>
		Read only
Tasks		<b>▽</b>
		Read only
Custom Objects	<b>▽</b>	<b>▽</b>
	2 custom objects per license (custom objects in managed packages don't count toward this limit)	10 custom objects per license (custom objects in managed packages don't count toward this limit)
Notes and Attachments		<b>▽</b>
		Note: The Notes and Attachments related list is not available on accounts and contacts.
Additional Storage	150 MB (25,000 active users license)	
	2 GB (250,000 active users license)	
	10 GB (1,000,000 active users license)	
	60 GB (5,000,000 active users license)	

We recommend that the number of External Identity license users in your community not exceed ten million unique users per month. If you require additional user licenses beyond this limit, contact your Salesforce account executive. Exceeding this limit may result in an extra charge and decrease expected functionality.

For more information on setting up your community to support External Identity license users, see the Salesforce Help and Using Templates to Build Communities.

# CHAPTER 13 Get More Information about Salesforce Identity, Single Sign-On and Security

Links to more sources of information about Salesforce Identity.

Salesforce Identity also supports external identities for portal access, and you can enable partners and customers as Identity users. For information on using external identities, see

Use the following links for other useful resources.

- Salesforce Identity Web page
- Salesforce Identity "How To" videos
- Security Single Sign-On Implementation Guide [PDF]
- Understanding Authentication in the Force.com REST API Developer Guide
- Salesforce Identity Connect User Guide
- The developer.salesforce.com Identity home page
- Salesforce Security cheatsheets

# **INDEX**

Active Directory 29–30 App Launcher configure 17 permission set 19 profile 18, 21 Apps opening 20	Identity (continued) scenario 4 Identity Connect 29 Identity provider adding on login page 13 identity provider certificate 23  L Login page 28, 39	
D Domain name	My Domain	
define a domain name 11 getting system performance information 16 login page branding 12	See: Domain name 9	
login policy 13 overview 9 URL changes 14	Password change user 26 identity confirmation 26	
E external identity provider 31	identity verification 26 login verification 26 two-factor authentication 26	
Force.com app menu reordering 20–21	Passwords changing by user 27 identity confirmation 27 login verification 27 two-factor authentication 27 permission set licenses 30 Permission set licenses 30	
Google Apps 22 Google connected app 24 Google Single Singl		
Google Single Sign-On 23  Identity  links to more information 41  monitor 36  overview 1  quick start  5-7, 32-34	S Security adding identity providers on login page 13 Subdomain name deploying 14 implementation guidelines 15 setup overview 11 testing 14	
App Launcher 7 Federation ID 32 Generate SAML 33 My Domain 6 Troubleshoot SAML 34 reports 35, 37	User setup     activate device 26     change password 26     changing passwords 27     verifying identity 27	