



Implement Seamless Cross-Cloud Identity

Salesforce, Spring '24



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IMPLEMENT SEAMLESS CROSS-CLOUD IDENTITY

Unify customer data with a single identity for each customer across your ecommerce sites and your communities. Enable one identity and give the customer visibility through the entire product catalog.



Get Started



Explore system architecture related to this solution.

- [B2C Industry Blueprint](#)
- [B2C Reference Architecture](#)
- [B2C Solution Architectures](#)



Take Trailhead modules related to this solution.

- [Salesforce Solution Kits: Quick Look](#)
- [Customer 360 Guide for Retail: Quick Look](#)
- [Customer 360 Guides: Quick Look](#)

This solution kit helps you:

- Enable one identity and log in across Commerce Cloud and Experience Cloud.
- Transfer the customer to the ecommerce site without having to log in with different credentials.
- Give the customer visibility through the entire product catalog and complete orders.
- Provide better customer experience.

Required Products

Product Pre-Requisites

- Experience Cloud
- Salesforce Identity
- Commerce Cloud Digital

License Requirement

- Experience Cloud and Salesforce Identity

Implement This Solution

[Solution Architecture](#)

Discover how use cases map to solutions with a visual illustration. See how recommended products integrate with back end systems and how data is passed between them when you implement seamless cross-cloud identity.

[Seamless Identity Solution Workflow](#)

Learn how data flows through the configurations to implement seamless cross-cloud identity.

[Design Considerations](#)

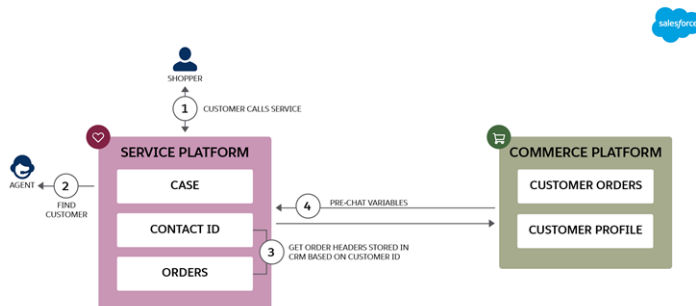
Keep these design considerations in mind when you implement seamless cross-cloud identity.

[Configurations](#)

Use these configurations to implement seamless cross-cloud identity.

Solution Architecture

Discover how use cases map to solutions with a visual illustration. See how recommended products integrate with back end systems and how data is passed between them when you implement seamless cross-cloud identity.



Related Content



Review this solution's use case and purpose.

- [Implement Seamless Cross-Cloud Identity](#) on page 1



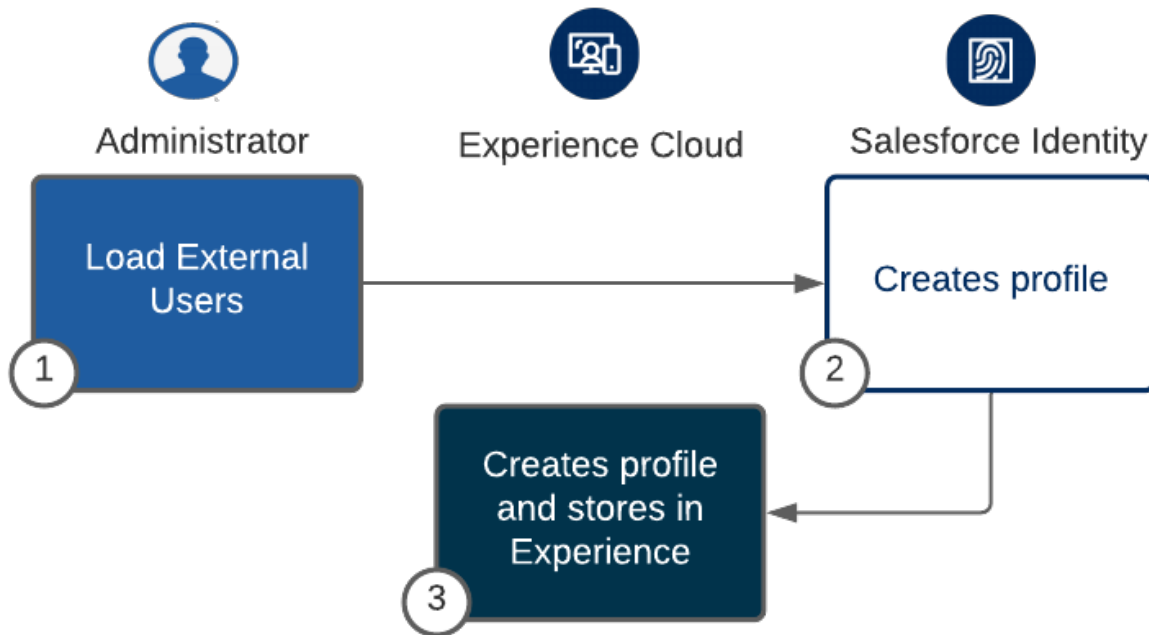
Take the next steps in this implementation.

- [Seamless Identity Solution Workflow](#)
- [Design Considerations](#)
- [Configurations](#)

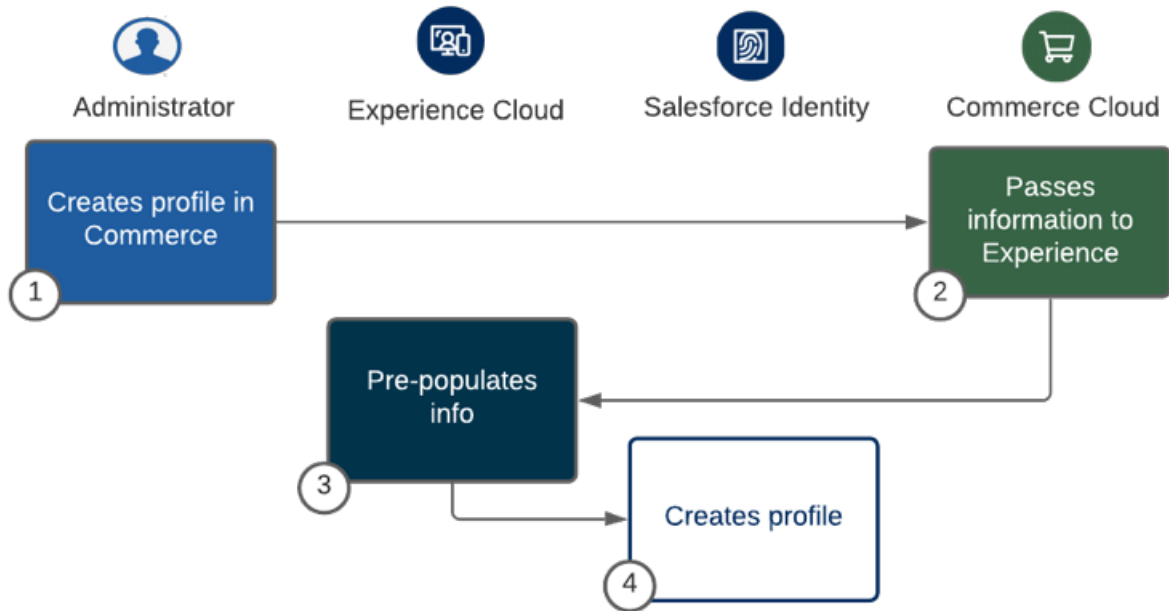
Seamless Identity Solution Workflow

Learn how data flows through the configurations to implement seamless cross-cloud identity.

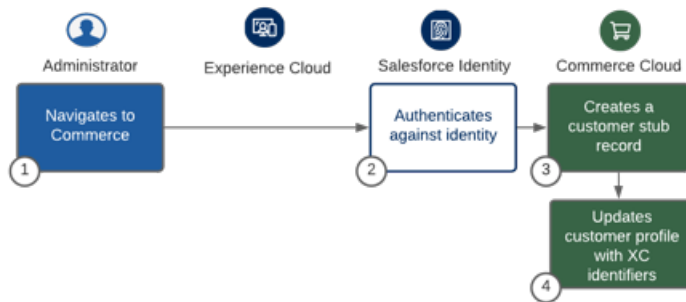
Workflow



1. The customer requests to create a profile.
2. The customer's profile is created in Salesforce Identity.
3. The customer's profile is created in the Salesforce Community.



1. The customer requests to create a profile.
2. The customer’s profile is created in B2B Commerce.
3. The customer’s profile is created in the Salesforce Community.



1. A customer who has previously created a profile in Salesforce Identity visits a storefront.
2. The customer logs in. They’re authenticated by Salesforce Identity.
3. A stub profile is created in B2B Commerce.
4. B2B Commerce updates the customer’s profile.

Related Content


 Review earlier steps in this solution.

- [Solution Architecture](#)



Take the next steps in this implementation.

- [Design Considerations](#)
- [Configurations](#)

Design Considerations

Keep these design considerations in mind when you implement seamless cross-cloud identity.

Maintain One Source of Customer Information for Core and Primary Profile Information

- To minimize synchronization and migration of customer profile data, set up the primary profile in Communities.
- Establish one source for customer profiles that all integrated environments can use.
- You can pull profile information (first names, last names, and email addresses) from Experience sites via REST into a Commerce Experience. As you make profile changes in Experience Cloud, you can push changes to Commerce Cloud if a use case requires them.
- Architect a commerce experience so that you don't edit in Commerce Cloud. You manage profiles in Communities.

Maintain Customer-Specific Profile Data That's Accessible Across Commerce Cloud and Experience Cloud Sites

Access profile and customer shopping data from Commerce Cloud and Experience sites via their individual REST APIs.

Experience Cloud is the system of record for customer profile data, which includes:

- Individual Profile
- Authentication Credentials

Commerce Cloud is the system of record for customer shopping data, which includes:

- Address Book
- Payment Information
- Wishlists and Product Lists

Avoid Syncing Customer Profiles Across Commerce Cloud and Experience Sites

Synchronization and replication of customer data across Commerce Cloud and Experience sites requires custom integration. The ongoing maintenance of this integration can be costly. Ideally, a cross-cloud profile management solution isn't dependent on this capability.

If a user changes profile data, we recommend:

- Name - Store in Experience Cloud, which Commerce Cloud references
- Address - Update to Commerce Cloud
- Email - Store in Experience Cloud, which Commerce Cloud references

Data Migration

When importing data across multiple systems, maintain the profile creation and modification workflows within every cloud. Confirm that every profile within Commerce Cloud and Experience Cloud includes the relevant cross-cloud identifiers.

Be aware of these considerations:

- Currently, no automated process or migration framework can facilitate customer data imports and migration between Commerce Cloud and Communities or Service Cloud.
- Avoid individual record migration strategies when using REST API-based migration. The required cycle time to execute these strategies may not meet customer expectations. To export data, use the bulk import and export capabilities of both platforms. Reconcile cross-cloud unique identifier mappings, then import the data again.

- Export customer data for Experience Cloud via Business Manager in its native XML format. After you export it, migrate the XML data to an external database to facilitate profile remediation.
- Export customer data for Experience Cloud via the Salesforce Bulk API. After you export it, migrate the customer data to an external database to facilitate profile mediation.

Track Experience Cloud Authentication in Commerce Cloud with an Embedded Login

When a customer authenticates via Experience Cloud but hasn't authenticated via Commerce Cloud, evaluate the value of an [embedded login](#).

When a user clicks the button and enters credentials in the login form, Salesforce authenticates the user. Salesforce checks the connected app to determine the type of access token to grant.

Salesforce sends the access token to the callback.

The callback uses the access token to pull the user's information from Salesforce and cache it locally.

The onlogin function determines which information to display to the user.

If the website requires ongoing interaction with Salesforce after authentication, the connected app maintains a connection between the web page and the Salesforce Experience site.

Retrieve Commerce Cloud Data from Experience Cloud Using Open Commerce APIs

Communities doesn't use all Commerce Cloud data objects (for example, wish lists, product lists, and payment information). Every Experience site user has a profile that lives in Commerce Cloud. The Open Commerce API accesses and manages this data.

Data Migration Strategy

When importing data across multiple systems, maintain profile creation and modification workflows within every cloud. That way, you include the relevant cross-cloud identifiers in every profile.

Be aware of these considerations.

- Salesforce doesn't yet offer automated processes or migration frameworks to facilitate customer data imports and migration between Commerce Cloud and Salesforce Experience sites or Service Cloud.
- Avoid individual record migration strategies when using REST API-based migration. The cycle time required to execute these strategies might not meet customer expectations. To export data, use the bulk import and export capabilities in Commerce Cloud and Experience Cloud. Reconcile cross-cloud unique identifier mappings, then import the data again.
- Export customer data for Experience Cloud using Business Manager in its native XML format. After you export it, migrate the XML data to an external database to facilitate profile remediation.
- Export customer data for Experience Cloud using the Salesforce Bulk API. After you export it, migrate the customer data to an external database to facilitate profile mediation.

The type of migration you perform impacts mediation. The implementation and cloud products you select affect the customer profile mediation and migration approach.

Profile mediation requires you to:

- Confirm whether you have customer profile representation in Experience Cloud and Service Cloud. If so, retrieve the UserID, PersonAccount AccountID, and ContactID. Decorate the Commerce Cloud profile with this data.
- Set up the PersonAccount with the Commerce Cloud Login, CustomerNo, and internal CustomerID.

Related Content



Review earlier steps in this solution.

- [Solution Architecture](#)

- [Seamless Identity Solution Workflow](#)



Take the next steps in this implementation.

- [Configurations](#)

See Also

- [Experience Cloud Sites as an Identity Provider \(requires Commerce Cloud XChange account\)](#)
- [Configuring and Implementing OAuth2 Providers](#)
- [Create a Branded Login Page](#)
- [How to Implement Embedded Login](#)

Experience Cloud Trailhead

- [Experience Cloud Basics](#)
- [Engage with Your Customers](#)
- [Engage with Your Employees](#)
- [Engage with Your Partners](#)
- [Get Started with Experience Cloud](#)

Identity Trailhead

- [Connect to Individual Customers](#)
- [Create a Self-Registration Page](#)
- [Customize Your Login Process with My Domain](#)
- [Get to Know Salesforce Identity](#)
- [Get to Know Salesforce Identity Users](#)
- [Identity Basics](#)
- [Identity for Customers](#)
- [Learn the Language of Identity](#)
- [Prepare Your Org for Salesforce Customer Identity](#)
- [Secure Your Users' Identity](#)
- [Set Up a Experience Cloud for Salesforce Customer Identity](#)
- [Set Up Single Sign-On for Your Internal Users](#)
- [Set Up Social Sign-On](#)
- [User Authentication](#)
- [Use Salesforce Identity Beyond Your Internal Org](#)

Configurations

Use these configurations to implement seamless cross-cloud identity.

Salesforce Experience Cloud Setup

Use the person or contact account to set up Experience Cloud members.

- The Commerce Cloud to Service Cloud connector supports person accounts out-of-the-box. Contact accounts require some customization.

Store the customer's core profile information in Experience Cloud.

- Customers register their profile through communities.
- When a customer chooses to register from within Commerce Cloud, a redirect sends them to the Experience Cloud registration form. They do not see registration capability in Commerce Cloud.
- The Experience Cloud registration process creates the Experience Cloud user profile.
- Upon registration, Experience Cloud invokes a remote OAuth2 authentication request to Commerce Cloud which creates the externally authenticated profile.

If Marketing Cloud is not going to be part of the use case, use Contactless Users as an Option.

- If you implement Customer 360 Data Manager, use the contact-specific record to authenticate with Commerce Cloud.

Salesforce Commerce Cloud Setup

Customers authenticate to Communities and Commerce Cloud via Salesforce Identity.

- Configure Salesforce Identity as an OAuth2 provider within Commerce Cloud.
- This setup uses a common login experience to authenticate against Commerce Cloud and Experience Cloud.
- When an authenticated customer visits the commerce experience, they authenticate via OAuth2 integration seamlessly without requesting credentials.

Commerce Cloud maintains a stub and shadow record that represents the customer.

- When a customer authenticates for the first time via OAuth2, it creates an external profile within Commerce Cloud. That profile represents the local Commerce Cloud profile for the customer.

Cross-cloud identifiers decorate customer profiles.

- Commerce Cloud includes the Experience Cloud UserID and PersonAccount Account/ContactID.
- Experience Cloud includes the Commerce Cloud CustomerNo, Login, and Internal CustomerID.

When authenticated customers visit the commerce experience, they authenticate via OAuth2 integration without having to request credentials.

- If the number of users is larger than 10 million, or greater than 1,000 logins per minute, confirm performance considerations with Salesforce Customer Support.

Implement OAuth2 Integration Between Experience Cloud and Commerce Cloud Via Salesforce Identity

Establish Communities as the Commerce Cloud identity provider and enable Commerce Cloud customers to authenticate against their Experience site customer profile.

In this model:

- Communities serve as the master for customer profile information.
- Commerce Cloud configures Communities as a trusted OAuth2 provider that it authenticates against.
- Customers register their profiles via Communities, then authenticate the commerce experience via OAuth2.
- The OAuth2 authentication enables the creation of a Commerce Cloud profile which is linked to the Experience site profile via the OAuth2 provided identifier.
- OAuth2 handoffs across both experiences handle seamless authenticated access between Commerce Cloud and Experience Cloud sites.
- Learn from our [best practices](#) for creating a branded login experience.

Set up Trusted System Auth in Commerce Cloud as part of the Identity and Commerce Cloud integration.

This new API is for Salesforce customers who store Commerce Cloud passwords in external systems.

The trusted auth service is specifically for system-to-system API communication. It creates a session that doesn't require a user name or password. That's because the Commerce Cloud and Communities systems trust each other.

Do not use this in place of authentication. You can get information from the customer number, but not authentication.

- This API endpoint lets customers with external IDP profiles manage their data from an external system. It uses the Commerce Cloud SHOP API and scopes the access to their data.

Related Content



Review earlier steps in this solution.

- [Solution Architecture](#)
- [Seamless Identity Solution Workflow](#)
- [Design Considerations](#)