

The Salesforce logo, consisting of the word "salesforce" in white lowercase letters inside a blue cloud-like shape.

salesforce

Case Management Across Multi-Orgs

Setup Instructions

Aug 10, 2017

Intro

- Salesforce to Salesforce with Lightning Support
- Sync objects to another org with an Apex scheduled job
- Authentication with Connected App
- OAuth config and tokens managed by Custom Metadata Type and Custom Settings
- Custom fields (on Case) to manage the sync state and connection



Prerequisites

- Target Org:
 - The organization where the package is installed
 - The organization where you are receiving the update
 - Must have MyDomain setup
 - Classic: *lss-setup-na38-ee.my.salesforce.com*
 - Lightning: *sc-labs-dev-3-dev-ed.lightning.force.com*
- Source Org:
 - The organization where the target org getting the update from
 - Must have MyDomain setup
 - Classic: *lss-setup-na38-ee.my.salesforce.com*
 - Lightning: *lss-setup-na38-ee.lightning.force.com*

Create a Connected App

- This needs to be done manually on the target org post package installation
- Connected App creation only available in Classic at this time (Spring 17 Release)
- Navigate to *Setup -> Create -> Apps (Connected Apps) -> New*
 - Fill in the basic information required fields
 - Check the “Enable OAuth Settings” checkbox
 - Must use the target org MyDomain in the Callback URL field
 - <MyDomain>/apex/sfdc_callback, e.g:
https://sc-labs-dev-3-dev-ed.my.salesforce.com/apex/sfdc_callback
 - Use the following “Selected OAuth Scopes”
 - chatter_api
 - api
 - refresh_token, offline_access

Create a Connected App (cont.)

Secure <https://sc-labs-dev-3-dev-ed.my.salesforce.com/app/mgmt/forceconnectedapps/forceAppEdit.apexp?applicationId=06Pf4000000kBCV&retURL=%2Fui%2Fsetup%2FSetup%3Fsetupid%3DDevTools...>

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Lightning Experience Migration Assistant
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Salesforce1 Quick Start

Force.com Home

Administer

- Manage Users
- Manage Apps
- Manage Territories
- Company Profile
- Security Controls
- Domain Management
- Communication Templates
- Translation Workbench
- Data Management
- Mobile Administration
- Desktop Administration
- Lightning for Outlook
- Lightning for Gmail
- Lightning Sync
- Email Administration
- Google Apps
- Data.com Administration

Build

Save Cancel

Basic Information

Connected App Name ⓘ

API Name

Contact Email

Contact Phone

Logo Image URL
[Upload logo image or Choose one of our sample logos](#)

Icon URL
[Choose one of our sample logos](#)

Info URL

Description

ⓘ = Required Information

API (Enable OAuth Settings)

Enable OAuth Settings ☒

Enable for Device Flow ☐

Callback URL

Use digital signatures ☐

Selected OAuth Scopes

Available OAuth Scopes

- Access and manage your Eclair data (eclair_api)
- Access and manage your Wave data (wave_api)
- Access custom permissions (custom_permissions)
- Access your basic information (id, profile, email, address, phone)
- Allow access to your unique identifier (openid)
- Full access (full)
- Provide access to custom applications (visualforce)
- Provide access to your data via the Web (web)

Add
Remove

Selected OAuth Scopes

- Access and manage your Chatter data (chatter_api)
- Access and manage your data (api)
- Perform requests on your behalf at any time (refresh_token, offline_access)

Require Secret for Web Server Flow ☒

Create this connected app on target org post the package installation

Connected App Details

Secure <https://sc-labs-dev-3-dev-ed.my.salesforce.com/app/mgmt/forceconnectedapps/forceAppDetail.apexp?applicationId=06Pf4000000kBCV&id=0Cif4000000k9dx>

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- Google Apps
- Data.com Administration

Build

- Customize
- Create

Apps

Connected App Name
Lightning Salesforce to Salesforce

Back to List: Custom Apps

Edit Delete Manage

Version 1.0

API Name Lightning_Salesforce_to_Salesforce

Created Date 8/10/2017 12:20 PM

By: Admin User

Contact Email support@salesforce.com

Contact Phone

Last Modified Date 8/11/2017 9:54 PM

By: Admin User

Description

Info URL

ClientId

ClientSecret

API (Enable OAuth Settings)

Consumer Key 3MVG9zITNB08BA1TY1623egUe2.XdEZU1aDpbivDEFpgBgx7RsPr0o.Is4pxLb43wqQfucEorw4UPEzGMog

Selected OAuth Scopes Access and manage your data (api)
Access and manage your Chatter data (chatter_api)
Perform requests on your behalf at any time (refresh_token, offline_access)

Enable for Device Flow ☐

Token Valid for 0 Hour(s)

Include Custom Permissions ☐

Consumer Secret [Click to reveal](#)

Callback URL https://sc-labs-dev-3-dev-ed.my.salesforce.com/apex/sfdc_callback

Require Secret for Web Server Flow ☒

Include Custom Attributes ☐

RedirectURL

Custom Connected App Handler

Apex Plugin Class

Run As

Trusted IP Range for OAuth Web server flow [New](#)

No records to display

Custom Attributes [New](#)

No records to display

Setup Custom Metadata Type

- This can be done either in Classic or Lightning
- In Classic: *Setup->Develop->Custom Metadata Type->Manage Records (SFDC_S2S_OAuth_Settings) -> New*
- Fill in Label and Name
 - **ClientId**, **ClientSecret** and **RedirectURL** need to be copied from the connected app created from last slide (Setup->Create->Apps, click in the link of the Name of your connected app)
 - **LoginUrl**: this is the MyDomain URL for the source org, e.g:
<https://lss-setup-na38-ee.my.salesforce.com>

Setup Custom Metadata Type (cont.)

Browser address bar: <https://sc-labs-dev-3-dev-ed.my.salesforce.com/m00f4000000kE4P/e?retURL=%2Fm00%3Fsetupid%3DCustomMetadata>

Navigation bar: Home Chatter Accounts Contacts Cases Solutions Reports Dashboards +

Header: Admin User Setup Help Service

Banner: Take Salesforce with you wherever you go. Run your business from any mobile device with the Salesforce1 Mobile App. Download on the App Store GET IT ON Google play

Left sidebar: Quick Find / Search... Expand All | Collapse All Lightning Experience Migration Assistant Switch to the modern, intelligent Salesforce. Get Started Salesforce1 Quick Start Force.com Home

SFDC_S2S_OAuth_Settings

Help for this Page

SFDC_S2S_OAuth_Settings Edit Save Save & New Cancel

Information ⓘ = Required Information

Label	EE38_Connected_APP	Protected Component	☐ ⓘ
SFDC_S2S_OAuth_Settings Name	EE38_Connected_APP ⓘ	Namespace Prefix	
ClientId	3MVG9ziTNB8o8BA1TY		
ClientSecret	583296324296737763i		
LoginUrl	https://ss-setup-na38-i		
RedirectUrl	https://sc-labs-dev-3-d		

Save Save & New Cancel

Add Remote Site Settings

- This can be done either in Classic or Lightning
- In Classic: *Setup->Security Control->Remote Site Settings-> New*

Secure https://sc-labs-dev-3-dev-ed.my.salesforce.com/0rp?retURL=%2F0rp%3Fspl1%3D1%26setupid%3DSecurityRemoteProxy%26retURL%3D%252Fui%252Fsetup%252Fsetup%253Fsetupid%253DSe... ☆ Other Bookmarks

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Admin User Setup Help Service

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Security Controls

Remote Site Edit

Enter the URL for the remote site. All s-controls, JavaScript OnClick commands in custom buttons, Apex, and AJAX proxy calls can access this Web address from salesforce.com.

Remote Site Edit Save Save & New Cancel

Remote Site Name Lightning_S2S_ENDPOINT

Remote Site URL https://ss-setup-na38-ee.my.salesforce.com

Disable Protocol Security ☐

Description Need this to make a callout to the source org

Active ☒

Save Save & New Cancel

Initiate OAuth flow with “/apex/sfdc_auth”

The screenshot shows a web browser window with the URL `https://sc-labs-dev-3-dev-ed.lightning.force.com/apex/sfdc_auth`. The browser's address bar and the page's header both display this URL. A red box highlights the URL in the address bar, and another red box highlights the URL in the page header. A red arrow points from the text "From the target org" to the first red box. Another red arrow points from the text "Start the OAuth flow" to the second red box. The page content includes a "Quarterly Performance" section with a "Week View" toggle, a "GOAL" button, and a chart area. The chart area contains the text "Add the opportunities you're working on, then come back here to view your performance." Below the chart area, there is a "Today's Events" section with the text "Looks like you're free and clear the rest of the day." and a "View Calendar" link. To the right of the "Today's Events" section is a "Today's Tasks" section with the text "Nothing due today—go grab a coffee while there's still time." The page also features a "Service" menu on the left and a "Assistant" section on the right with the text "Nothing needs your attention right now. Check back later."

From the target org

Start the OAuth flow

Login to Source Org and Grant Access

Secure [https://lss-setup-na38-ee.my.salesforce.com](https://lss-setup-na38-ee.my.salesforce.com/setup/secur/RemoteAccessAuthorizationPage.apexp?source=CAAAV3TX8u7ME8wRTAwMDAwMDAwMDA1AAAAOP9iJpA...)

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The source org

Allow Access?

The API user used to grant access

Lightning Salesforce to Salesforce is asking to:

- Access your basic information
- Access and manage your Chatter data
- Access and manage your data
- Perform requests on your behalf at any time

Do you want to allow access for
[setup@ee.na38.com?](#) (Not you?)

Deny Allow

To revoke access at any time, go to your personal settings.

Custom Settings created by OAuth Flow

- Once the OAuth flow is completed, a new entry of “SFDC_S2S_OAuth2Tokens” is created
- In Classic: *Setup->Develop->Custom Settings-> SFDC_S2S_OAuth2Tokens(Manage)*

The screenshot displays the Salesforce Classic user interface. At the top, the browser address bar shows the URL: `https://sc-labs-dev-3-dev-ed.my.salesforce.com/setup/ui/listCustomSettingsData.apexp?com.salesforce.visualforce.ViewStateCSRF=VmpFPSxNakF4TnkwD09DMHhOVIF4TnpveE1UbzBOeTqXtnpSY...`. The Salesforce header includes the logo, a search bar, and navigation links for Admin User, Setup, Help, and Service. Below the header is a navigation bar with links for Home, Chatter, Accounts, Contacts, Cases, Solutions, Reports, and Dashboards. A banner for the Salesforce1 Mobile App is visible. The left sidebar contains the 'Lightning Experience Migration Assistant' and 'Salesforce1 Quick Start' sections. The main content area is titled 'Custom Setting: SFDC_S2S_OAuth2Tokens'. It includes instructions on how to use custom settings and a table of data. The table has columns for Location, RefreshToken, and InstanceUrl. The 'View' section shows 'All' and 'Create New View'. At the bottom, there is a 'New' button and a table with columns for Setup Owner and Location. The 'Setup Owner' column shows 'No records to display'.

Custom Setting
SFDC_S2S_OAuth2Tokens

If the custom setting is a list, click **New** to add a new set of data. For example, if your application had a setting for country codes, each set might include the country's name and dialing code.

If the custom setting is a hierarchy, you can add data for the user, profile, or organization level. For example, you may want different values to display depending on whether a specific user is running the app, a specific profile, or just a general user.

[Edit](#) [Delete](#)

▼ Default Organization Level Value		
Location	RefreshToken	InstanceUrl
SC Lab Contest S2S Security Review Test Org	5Aep861qzw.QaPSN9iRQT8WbsuinU9yqt5BoldQo7Nm5YS4zQwQvqZkngVZCJ8dnQwrMPvDEOjYqIRkBNYGJjm	https://iss-setup-na38-ee.my.salesforce.com

View: [All](#) [Create New View](#)

[New](#)

Setup Owner	Location
No records to display.	

Setup Case PageLayout

- Up to this point, we are doing setup in Classic, let's switch to Lightning!
- In Lightning: *Setup->Object Manager->Case->Case PageLayout->Case Layout*
- *Drag and drop 3 custom fields (installed from package) to the "Case Detail"*
 - *SFDC_S2S_External_Case_ID*
 - *SFDC_S2S_Last_Synced*
 - *SFDC_S2S_Sync_Enabled*
- *Save!*

Setup Case Layout (cont.)

Secure https://sc-labs-dev-3-dev-ed.lightning.force.com/one/one.app?source=aloha#/setup/object/Case/PageLayouts/page?address=%2Flayouteditor%2FlayoutEditor.apexp%3Ftype%3DCase%26iid%3D00...

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Setup Home Object Manager

SETUP > OBJECT MANAGER
Case

Details

Fields & Relationships

Case Page Layouts

Case Close Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Object Limits

Record Types

Related Lookup Filters

Search Layouts

Triggers

Validation Rules

Save Quick Save Preview As... Cancel Undo Redo Layout Properties

Quick Find Field Name

Fields	Section	Business Hours	Case Reason	Contact Mobile	Date/Time Closed	Escalated	Potential Liability	SFDC_S2S_Last_Synced	Subject
Buttons	Blank Space	Case Number	Closed When Created	Contact Name	Date/Time Opened	Internal Comment	Priority	SFDC_S2S_Sync_Ena...	Type
Custom Links	Account Name	Case Origin	Contact Email	Contact Phone	Description	Last Modified By	Product	SLA Violation	Web Company
Quick Actions	Asset	Case Owner	Contact Fax	Created By	Engineering Req N...	Parent Case	SFDC_S2S_External...	Status	Web Email
Salesforce1 & Lightning Actions									
Expanded Lookups									

Salesforce1 and Lightning Experience Actions

Actions in this section are predefined by Salesforce. You can override the predefined actions to set a customized list of actions on Salesforce1 and Lightning Experience pages that use this layout. If you customize the actions in the Quick Actions in the Salesforce Classic Publisher section, and have saved the layout, then this section inherits that set of actions by default when you click to override.

Case Detail

Standard Buttons Edit Delete Change Owner Change Record Type Close Case Clone Sharing Custom Buttons

Case Information (Header visible on edit only)

Case Owner	Sample User
Case Number	GEN-2004-001234
Contact Name	Sample Contact
Account Name	Sample Account
Type	Sample Type
Case Reason	Sample Case Reason

Status	Sample Status
Priority	Sample Priority
Contact Phone	1-415-555-1212
Contact Email	sarah.sample@company.com
Case Origin	Sample Case Origin
SFDC_S2S_External_Case_ID	Sample SFDC_S2S_External_Case_ID
SFDC_S2S_Last_Synced	8/12/2017 11:12 AM
SFDC_S2S_Sync_Enabled	✓

Link cases

Secure https://sc-labs-dev-3-dev-ed.lightning.force.com/one/one.app?source=aloha#/sObject/500f4000002L1CtAAK/view

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Service Home Chatter Accounts Contacts Cases Reports Dashboards

Case1 linked to EE38

+ Follow Edit Delete Change Owner

Post Log a Call

Share an update... Share

Most Recent Activity

Search this feed

Admin User 10h ago

abc . efg

Like Comment

Write a comment...

Admin User 10h ago

how about completely different ball game....

Like Comment

Case Number: 00001026

Priority: Medium

Contact Name: Search Contacts

Contact Phone:

Account Name: Search Accounts

Contact Email:

Type: --None--

Case Reason: --None--

* Case Origin: Web

SFDC_S2S_External_Case_ID: 500f400000IGhSZAA0

SFDC_S2S_Last_Synced:

Date: Time:

SFDC_S2S_Sync_Enabled: ☒

Web Email:

Web Company:

Cancel Save

Case Id from a case in the source org

Schedule the Apex sync job

Secure | https://sc-labs-dev-3-dev-ed.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

File Edit Debug Test Workspace Help < >

Log executeAnonymous @8/11/2017, 11:18:30 PM SfdcS2SCaseSyncQueueable.apxc Log executeAnonymous @8/11/2017, 11:36:21 PM Log executeAnonymous @8/11/2017, 11:37:26 PM SfdcS2SCasesSyncSchedulable.apxc

Code Coverage: None API Version: 40 Go To

```
1 global class SfdcS2SCasesSyncSchedulable implements Schedulable {
2
3
4     global void execute(SchedulableContext SC) {
5         System.enqueueJob(new SfdcS2SCaseSyncQueueable());
6     }
7
8     public static void scheduleThis() {
9         System.schedule('Salesforce to Salesforce Cases Hourly Sync Job', '0 0 * * * ?', new SfdcS2SCasesSyncSchedulable() );
10    }
11 }
```

Enter Apex Code

```
1 SfdcS2SCasesSyncSchedulable.scheduleThis();
```

Execute this from Developer Console

Logs Tests Ch...

User

Admin User

Admin User

Admin User

Admin User

Admin User

Admin User

Admin User

	Read	Size
	Unread	2.01 KB
		39.57 KB
	Unread	2.01 KB
icQue...		37.06 KB
		2.01 KB
ut		46.07 KB

Verify the scheduled job

- In Lightning: *Setup->Environments->Scheduled Jobs*

The screenshot shows the Salesforce Lightning interface. The browser address bar displays the URL: <https://sc-labs-dev-3-dev-ed.lightning.force.com/one/one.app#/setup/ScheduledJobs/home?a:t=1502481982190>. The left sidebar contains the navigation menu with 'Setup' selected, and 'Environments' expanded to show 'Scheduled Jobs'. The main content area is titled 'Scheduled Jobs' and displays a table of all scheduled jobs. A red box highlights the job 'Salesforce to Salesforce Cases Hourly Sync Job'.

Setup Scheduled Jobs

All Scheduled Jobs [Help for this Page](#)

The All Scheduled Jobs page lists all of the jobs scheduled by your users. Multiple job types may display on this page. You can delete scheduled jobs if you have the permission to do so.

View: [All Scheduled Jobs](#) [Create New View](#)

Action	Job Name	Submitted By	Submitted	Started	Next Scheduled Run	Type
Del	Salesforce to Salesforce Cases Hourly Sync Job	User, Admin	8/11/2017 12:16 PM	8/11/2017 1:00 PM	8/11/2017 2:00 PM	Scheduled Apex

Case view in the Source Org

Secure <https://lss-setup-na38-ee.lightning.force.com/one/one.app?source=aloha#/sObject/5004400000IGeNZAAK/view>

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CASE
Case 2 to be shared with external org

+ Follow Edit Delete Change Owner

Priority: Medium Status: New Case Number: 00001005

FEED RELATED

Post

Share an update... Share

Latest Posts

Admin User 2m ago

New Item at 1:15pm

Like Comment

Write a comment...

Case Owner: Admin User

Case Number: 00001005

Contact Name

Account Name

SFDC_Investigation

Additional Information

Status: New Type

Case view in the Target Org after sync

The screenshot shows a Salesforce interface for viewing a case. The browser address bar highlights the URL: `https://sc-labs-dev-3-dev-ed.lightning.force.com/one/one.app#/sObject/500f4000002L2yoAAC/view`. The Salesforce navigation bar includes tabs for Service, Home, Chatter, Accounts, Contacts, Cases, Reports, and Dashboards. The main header displays the case title "Case 2 Linked to EE38" and action buttons: Follow, Edit, Delete, and Change Owner.

The left sidebar contains a "FEED" tab and a "RELATED" section. The "FEED" section shows a post by "Admin User" titled "Log a Call" with a "Share" button. Below the post is a "Most Recent Activity" section, which is highlighted with a red box. It shows a "New Item at 1:15pm" by "Admin User" 1m ago. Below this is a "Write a comment..." input field.

The right sidebar displays case details in a two-column layout:

Field	Value
Case Owner	Admin User
Case Number	00001027
Contact Name	
Account Name	
Type	
Case Reason	
Web Email	
Status	New
Priority	Medium
Contact Phone	
Contact Email	
Case Origin	
Email	SFDC_S2S_External_Case_ID 5004400000IGeNzAAK
Web Company	

The "Email" field value "5004400000IGeNzAAK" is highlighted with a red box.

Trigger sync manually (For testing)

The screenshot displays the Salesforce Developer Console interface. At the top, the browser address bar shows the URL: `https://sc-labs-dev-3-dev-ed.lightning.force.com/one/one.app?source=aloha#/sObject/500f4000002L3V5AAK/view`. Below this, the Force.com Developer Console window is open, showing the URL: `https://sc-labs-dev-3-dev-ed.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage`. A red box highlights this URL bar. In the center of the console, a text area titled "Enter Apex Code" contains the code: `SfdcS2SCaseSyncQueueable.process();`, which is also highlighted with a red box. Below the code entry area, there are buttons for "Open Log", "Execute", and "Execute Highlighted". The "Execute" button is the primary action for running the code. The background of the console shows a Salesforce record page for a Case object, with fields like "Priority" (Medium), "Contact Ph", "Contact En", "Case Origin" (Web), "SFDC_S2S", "500f4000", "Web Comp", and "Web Phon". The bottom of the console features a "Logs" tab and a table with columns: User, Application, Operation, Time, Status, Read, and Size. The time displayed is 17:43 PM.

Trigger sync right away

Thank You

