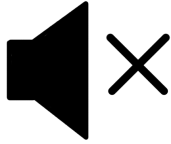


Nov 30, 2021

# Salesforce Platform Events in Cloud Application Integration

Prakash Jain, Principal Subject Matter Expert, GCS

# Housekeeping Tips



- Today's Webinar is scheduled for **1 hour**
- The session will include a webcast and then your questions will be answered live at the end of the presentation
- All dial-in participants will be muted to enable the speakers to present without interruption
- Questions can be submitted to "All Panelists" via the **Q&A option** and we will respond at the end of the presentation
- The webinar is **being recorded** and will be available on our **INFASupport YouTube channel** and **Success Portal** - where you can download the **slide deck** for the presentation. The link to the recording will be emailed as well.
- Please take time to complete the **post-webinar survey** and provide your feedback and suggestions for upcoming topics.

# Feature Rich Success Portal

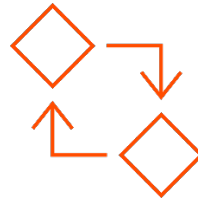
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Bootstrap trial and  
POC Customers



Enriched Customer  
Onboarding  
experience



Product Learning  
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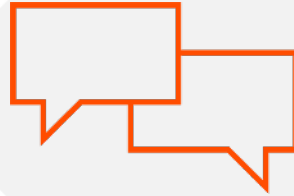
Tailored training and  
content  
recommendations

# More Information



## Success Portal

<https://success.informatica.com>



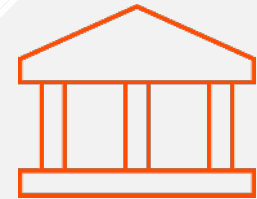
## Communities & Support

<https://network.informatica.com>



## Documentation

<https://docs.informatica.com>



## University

<https://www.informatica.com/in/services-and-training/informatica-university.html>



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# Working with Salesforce platform events in Cloud Application Integration

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# Agenda

- Introduction
- Pre-requisite for Salesforce platform events
- Creating Salesforce Platform event connection
- Reading event from Salesforce
- Generating platform events
- Error handling and recovery
- Demo / Use case
- Q&A

# Salesforce overview

# Salesforce Overview

Salesforce is a cloud-based Customer Relationship Management (CRM) solution for sales teams to manage contacts and sales activities. Salesforce can be used to store and manage contacts and data of the sales activities in the organization.

Salesforce enables to:

- Managing your contacts
- Keeping track of leads
- Generating reports
- Setting up and personalizing email marketing campaigns
- Managing social engagements
- Managing eCommerce
- Maintaining records of interactions with customers
- Integrating with third-party software etc.

# Salesforce Overview

Salesforce provides a Streaming API that enables streaming of events using the push technology. You can use the Streaming API to subscribe to Salesforce platform events, PushTopic queries, and change events. You can also publish messages to Salesforce platform events in near real time.

With Salesforce Connector, you can create a Salesforce connection and use it in an Application Integration process. You can create connections to the following Salesforce editions:

- Professional Edition
- Enterprise Edition
- Unlimited Edition

# Salesforce Overview

Application Integration supports the OAuth and Password methods by which you can authenticate the Salesforce connection.

You can create an Application Integration process to perform the following tasks:

- Read, update, or delete Salesforce objects.
- Subscribe to events from Salesforce streaming channels such as custom platform events, PushTopic queries, and change events.
- Publish messages to Salesforce custom platform events.

Salesforce Connector processes will be triggered upon an event such as an insertion, update, or deletion of a record in Salesforce.

# Prerequisites

- In order to create salesforce connection in Cloud Application Integration, one must install ICRT managed package for Salesforce.
- The Salesforce edition must be one of the following:
  - Professional Edition
  - Enterprise Edition
  - Unlimited Edition
  - Developer Edition



# Installing managed package in Salesforce

# Installing managed package in Salesforce

- You can use the Informatica Cloud Real Time for Salesforce package to:
  - Integrate Application Integration with Salesforce.
  - Test and publish a Salesforce connection in Application Integration to fetch the metadata from Salesforce.
  - Work with Salesforce objects when you run a process.
  - Work with Salesforce guides.
  - Use a Salesforce outbound message (OBM) that triggers an Application Integration process.

# Installing managed package in Salesforce

## Prerequisite:

- Salesforce APIs are enabled.
- You have administrative rights in the Salesforce organization where you want to install the managed package.

## Steps to install managed package:

1. Depending on the environment you use, log in to your production or sandbox Salesforce developer account.

- -Production: <https://login.salesforce.com/?ec=302&startURL=%2Fpackaging%2FinstallPackage.apexp%3Fp0%3D04t1J00000007uro>

The latest version of the managed can be found here: [https://network.informatica.com/onlinehelp/II/CS/prod/CAI/en/index.htm#page/cai-aaf-cloud-salesforce-managed-package/Installing\\_the\\_Salesforce\\_Managed\\_Package.html](https://network.informatica.com/onlinehelp/II/CS/prod/CAI/en/index.htm#page/cai-aaf-cloud-salesforce-managed-package/Installing_the_Salesforce_Managed_Package.html)

2. Enter your Salesforce developer account user credentials.

- On the Install Informatica Cloud Real Time for Salesforce page, select one of the following options:
- -Install for Admins Only. Select this option to allow only admin users in Salesforce to run guides.
- -Install for All Users. Select this option to allow all users in Salesforce to run guides on the objects they work with. **Most organizations grant access to all users.**
- -Install for Specific Profiles. Select this option to configure custom security settings.

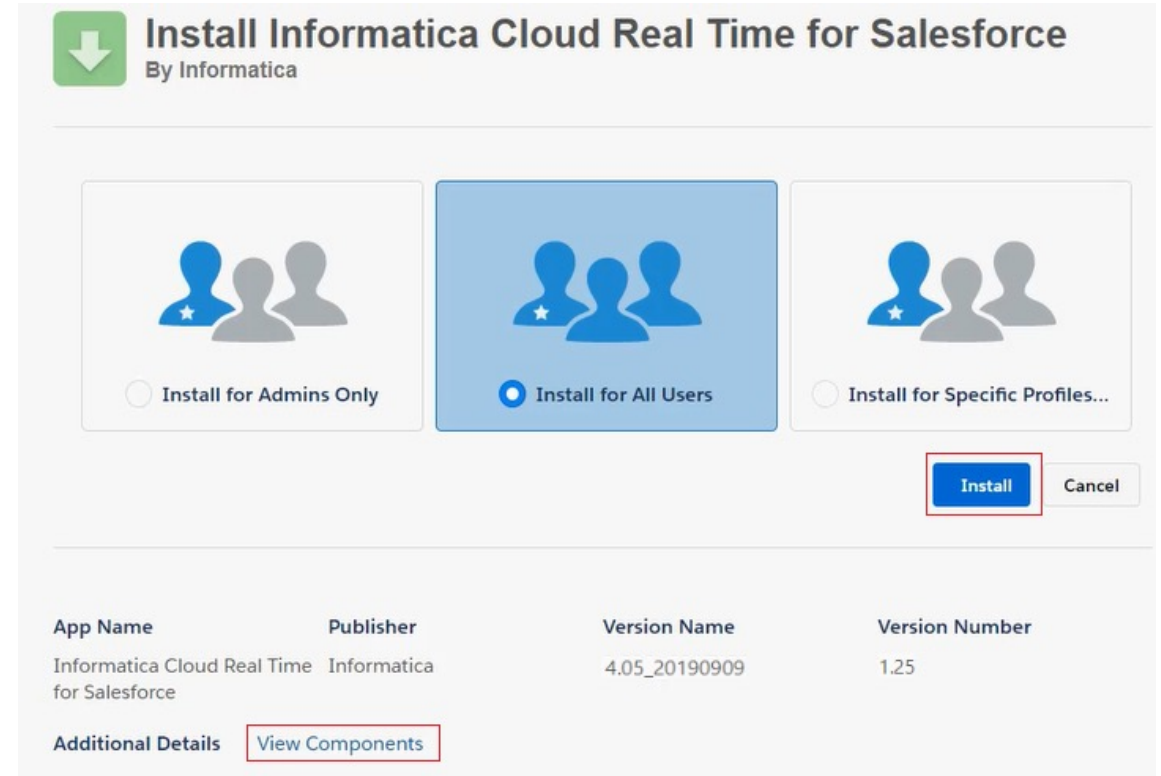
# Installing managed package in Salesforce

4. Click **Install**.

5. Click **Done** after the install is complete.

If the installation takes a long time, a message appears stating that you will receive an email when the installation is complete.

Click **Done**.



The screenshot shows the Salesforce App Manager interface for installing a managed package. At the top, there is a green download icon and the text "Install Informatica Cloud Real Time for Salesforce By Informatica". Below this, there are three installation options, each with a group of three user icons: "Install for Admins Only" (unselected), "Install for All Users" (selected with a blue radio button), and "Install for Specific Profiles..." (unselected). To the right of these options are "Install" and "Cancel" buttons. Below the options, there is a table with the following information:

| App Name                                   | Publisher   | Version Name  | Version Number |
|--|-------------|---------------|----------------|
| Informatica Cloud Real Time for Salesforce | Informatica | 4.05_20190909 | 1.25           |

At the bottom left, there is a link "View Components" next to the text "Additional Details".

# Demo

# Creating Salesforce platform event connection

- To Create a Salesforce Connection in Cloud Application integration click on new connection and select the type as Salesforce and enter valid credentials. Provide the name of the Platform event in the event source tab as /event/<nameofthePE> or name of /topic/< pushTopic> or /data/CDC
- You may use filter to limiting the CDC object.
- Test the connection and publish it.
- Configure an event target to publish messages to Salesforce custom platform events.

Note: Make sure to select an agent or group for run-on property.

The screenshot shows the 'Event Sources' tab in the Informatica Cloud Application integration interface. At the top, there are tabs for 'Properties', 'Event Sources' (which is selected), 'Event Targets', and 'Metadata'. Below the tabs is a button labeled '+ Add Event Source'. Underneath, there is a dropdown menu showing 'Source : Source'. The main configuration area is divided into two sections: 'Event:' and 'Properties:'. The 'Event:' section contains a 'Name:\*' field with the value 'Source', a 'Description:' text area with the text 'Use this event source to consume events from Salesforce streaming channels.', and an 'Enabled:' section with radio buttons for 'Yes' (selected) and 'No'. The 'Properties:' section contains a table with two columns: 'Name' and 'Value'. The table has two rows: 'Event Consumer:\*' with the value '/event/SP\_PE\_\_e' and 'Event Filter:' with an empty text input field.

| Name             | Value           |
|------------------|-----------------|
| Event Consumer:* | /event/SP_PE__e |
| Event Filter:    |                 |

# Demo

# Reading the event within the process

- After you create a Salesforce connection, you can use it in a process along with the associated event sources and event targets.
- The processes will be automatically triggered upon an event in Salesforce
- The Salesforce connection and the Salesforce consumer process must run on the same Secure Agent Group or Secure Agent machine. Similarly, the Salesforce connection and the Salesforce producer process must run on the same Secure Agent Group or Secure Agent machine.

The screenshot displays the Informatica Cloud Integration Designer interface. At the top, a tab labeled 'ConsumePlatformEventMessage' is active. Below it, the 'Design' pane shows a process flow starting with a 'Start' node, followed by a 'Create 1' task, then a 'Service 1' task, and finally an 'End' node. To the left of the design area is a palette with 'Assign...' and 'Service' options. Below the design area, the 'ConsumePlatformEventMessage Properties' pane is open. The 'General' tab is selected, showing the following configuration:

- Binding:** Event
- Event Source Name:** SFPlatformEventConnection > SFPlatformEventConnection:Source (highlighted with a red box)
- Applies To:** \* Any \*
- Run On:** \_SPAN1
- Run As:** Current User (Salesforce Only)



# Demo

# Publishing a platform event

# Publishing a platform event

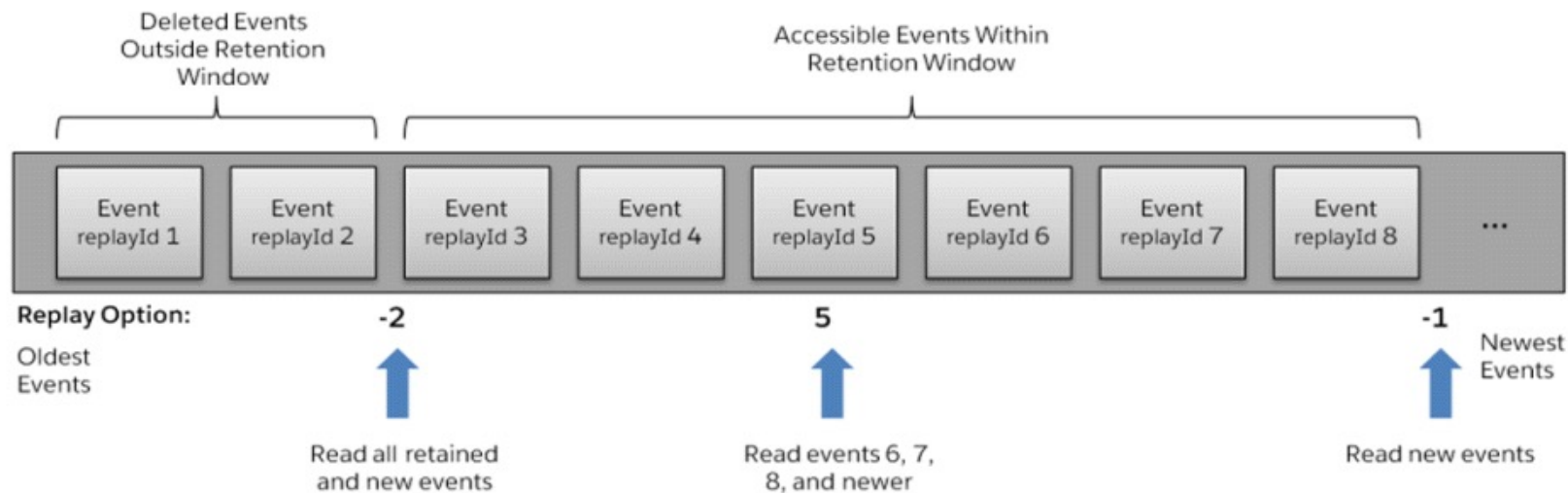
- To create a process to publish messages to Salesforce custom platform events:
  1. Create a process and click the Start step.
  2. Click the **Start** tab and select the process binding type as **REST/SOAP**.
  3. From the **Run On** list, select the Secure Agent group or Secure Agent machine where you configured the Salesforce connection to run.
  4. Add a Service step and then perform the following steps:
    - -From the **Service Type** list, select **Connection**.
    - -From the **Connection** list, browse and select the Salesforce connection that you created.
    - -From the **Action** list, select the Salesforce event target that you created in the Salesforce connection. Application Integration creates an input field called **event** to capture the event details. You cannot delete this input field. You also cannot add more input fields.
    - -Configure the message that you want to publish to the Salesforce custom platform event.
  5. Configure other steps and properties as needed.
  6. Validate, save, and publish the process.
  7. Invoke the process to publish messages to the Salesforce custom platform event.

# Demo

# Error Handling and recovery

# Error Handling and recovery

- You may perform the error handling at each of the step in the process and catch the fault for retry or send a email notification etc.
- The general advise is to perform logging to a database table with information like starttime, endtime and payload of the event.
- If the secure agent is down, the replayID in the file with filename format <Sfconnection-EventSource>.txt present under the folder {SecureAgent}\apps\process-engine\data\camel in the secure agent machine will be point to last processed event replayID. Once the agent is restarted, agent will automatically pick from this replayID.
- In case if you want to process the previous events on Salesforce, you update the replayID file with the appropriate replayID and restart the process server or secure agent or republish the connection.



# Rules and Guidelines for consumer process

- You cannot use Salesforce Connector to subscribe to or publish messages to Salesforce standard platform events.
- If you add a Wait step to a process to subscribe to Salesforce custom platform events, PushTopic queries, and change events, you must ensure that the wait period is earlier than 40 seconds. If the wait period exceeds 40 seconds, you might encounter a message loss. Add a Milestone step for an early reply and to prevent message loss.

# Demo Use case



# Use Case 1

- The first use case is to capture the changeEvent for lead object in Salesforce and perform realtime synchronization in the database.
- The database must capture both Lead inserts and Lead updates.
- The process must have replayID as part of the processTile.

# Use Case 2

- The use case is to read a platform event from Salesforce and perform logging into a temporary database table and write the message to Rabbit MQ.
- The message payload must be in the XML format. The process should do appropriate logging for better traceability in case of an issue during runtime.
- The process must do error handling wherever needed and must have a retry logic.
- The process should be deployed on the agent instead of agent group cluster.

# References

Salesforce connector for CAI online document:

- <https://network.informatica.com/onlinehelp/IICS/prod/CAI/en/index.htm#page/icrt-salesforce-connector-guide/Preface.html>

Few knowledge-based articles on Salesforce connector in CAI:

- [https://knowledge.informatica.com/s/article/HOW-TO-Manually-restart-the-executi?language=en\\_US&type=external](https://knowledge.informatica.com/s/article/HOW-TO-Manually-restart-the-executi?language=en_US&type=external)
- [https://knowledge.informatica.com/s/article/594731?language=en\\_US&type=external](https://knowledge.informatica.com/s/article/594731?language=en_US&type=external)
- [https://knowledge.informatica.com/s/article/HOW-TO-Pick-Up-Missed-Salesforce-Platform-Events-in-A-New-Secure-Agent-When-Assets-Are-Moved-from-One-Agent-to-Another?language=en\\_US&type=external](https://knowledge.informatica.com/s/article/HOW-TO-Pick-Up-Missed-Salesforce-Platform-Events-in-A-New-Secure-Agent-When-Assets-Are-Moved-from-One-Agent-to-Another?language=en_US&type=external)
- [https://knowledge.informatica.com/s/article/634334?language=en\\_US&type=external](https://knowledge.informatica.com/s/article/634334?language=en_US&type=external)

# Q & A



Thank You