



**October
2019**



COLD FUSION
user group **Seattle**



Agenda

- Introductions
- Goals
- Add Your Bio to the Seattle CFUG site
- Adobe ColdFusion Summit 2019 Recap
- Integrating Twilio for Conversion Tracking with Your CF Web App
- Next Meeting
- Questions/Answers/Help Needed



Introductions

- Tell us a little bit about who you are
- Share with us what you would like to get from this user group





Goals

- Assist ColdFusion Developers Throughout the Pacific Northwest
- Promote ColdFusion Developers Throughout the Pacific Northwest
- Connect Employers with ColdFusion Developers
- Establish a Community of Friendship Between ColdFusion Developers
- Provide Speaking Opportunities for ColdFusion Developers
- Change the Perception of ColdFusion as a viable platform



Add Your Bio to the Seattle ColdFusion User Group site

- Let prospective employers know you're available for ColdFusion Support
- Include your photo, biography, social media links and e-mail address
- Available for any active Seattle ColdFusion User Group member (attendance at a Seattle ColdFusion User Group Meeting in the past 3 months). Don't need to be a resident in the Pacific Northwest,



Adobe ColdFusion Summit 2019 Recap

- John Walker – HM Bay, INC
- Jim Schell – My Fire Rules
- Leon O'Daniel – The Boeing Company/O'Daniel Designs, LLC



Adobe ColdFusion Summit 2019 Recap – Leon O'Daniel

- CF Summit is a tremendous value and well worth the expense to attend.
- CF Summit 2019 was perhaps the best organized and well run CF Summit I have attended.
- I learned how much I still need to learn
- ColdFusion is moving to the cloud. Time to learn how to spin up ColdFusion applications on Amazon S3, and on other cloud platforms in the future.



Adobe ColdFusion Summit 2019 Recap – Leon O’Daniel

- Future versions of ColdFusion will allow you to package just the ColdFusion server features you need for deploying your application to the cloud.
- Adobe is absolutely committed to keeping ColdFusion relevant, and to establishing itself as a major player in the cloud space.



Adobe ColdFusion Summit 2019 Recap – Leon O’Daniel

Must attend sessions for me at CF Summit:

- ColdFusion and Vue – building CFML powered reactive applications by Matt Gifford
- GET /cfml - A Guide to Writing API Wrappers by Matthew Clemente
- ColdFusion for the next decade – All about the buzzworthy ColdFusion 2020 by Rakshith Naresh
- WebSockets 201: Beyond the Introduction by Giancarlo Gomez



Adobe ColdFusion Summit 2019 Recap – Leon O’Daniel

Must attend sessions for me at CF Summit:

- Angular for ColdFusion Developers by Josh Kutz-Flamenbaum
- [Angularjs + Reactjs + Vuejs] + CF – Integrating modern day JS Frameworks with ColdFusion by Uday Ogra



Adobe ColdFusion Summit 2019 Recap – Leon O’Daniel

Presentation Slides

All of the slides are currently available at

<https://coldfusion.adobe.com/2019/10/coldfusion-summit-2019-presentation-files/>

These are also linked from our Seattle CFUG Resources page at <https://www.seattlecfug.org/resources/>.



Integrating Twilio for Conversion Tracking with Your CF Web App

This presentation will cover:

- What is Twilio & why would I use it?
- The Use Case
- Demo
- Getting Started with Twilio
- Importing Data from Twilio using ColdFusion and SQL Server
- Downloading data as a CSV file from Twilio using ColdFusion
- Leveraging ColdFusion to generate spreadsheet and data-grid-based Twilio Conversion Reports



Integrating Twilio for Conversion Tracking with Your CF Web App

Demo

<https://www.seattlecfug.org/demos/twilioConversionTracking/>



Integrating Twilio for Conversion Tracking with Your CF Web App

What is Twilio & Why Would I Use It?

Twilio is a communications company that offers a variety of services for companies. It makes it super simple to integrate communications capabilities into your ColdFusion Application.

- All Twilio Solutions: <https://www.twilio.com/solutions>
- Exporting SMS and Call Logs: <https://support.twilio.com/hc/en-us/articles/223183588-Exporting-SMS-and-Call-Logs>



Integrating Twilio for Conversion Tracking with Your CF Web App

The Use Case

Customer is marketing on multiple online platforms, including Bing Places, Google My Business, Facebook, Instagram and MailChimp.

The customer would like to track the effectiveness of marketing on each platform by tracking phone calls from each platform



Integrating Twilio for Conversion Tracking with Your CF Web App

Getting Started

1. Create an Account with Twilio at <https://www.twilio.com/try-twilio>
2. Get a free phone number (normally \$1.00/month), plus per call fees. Trial account includes a \$15.00 credit
3. Configure the phone number to do something: <https://www.twilio.com/labs>



Integrating Twilio for Conversion Tracking with Your CF Web App

Getting Started

4. Download the *TwilioConversionTracking.zip* file from <https://www.seattlecfug.org/demos/twilioConversionTracking/>
5. Extract the *TwilioConversionTracking.zip* file. Copy the contents of the **code** folder to the root folder of your application (site)



Integrating Twilio for Conversion Tracking with Your CF Web App

Getting Started

6. Access your Twilio Account SID and Auth Token
 - Live credentials available from Dashboard
 - Test credentials available from Settings > General (only able to test making a call, getting a new phone number or sending a text message)
7. Update the settings.cfm file to display the proper:
 - ColdFusion Data Source (DSN) info
 - Mail server info
 - Twilio SID and Auth Token



Integrating Twilio for Conversion Tracking with Your CF Web App

Getting Started

8. Execute the **CreateTwilioObjects.sql** script in SQL Server Management Studio to create the necessary tables, stored procedures and user-defined functions
9. Create a login that has permissions to truncate tables and write data. Alternatively, you can use the **WITH EXECUTE as OWNER** command to provide permissions to execute a stored procedure that could truncate tables.

more info: <https://dba.stackexchange.com/questions/52828/what-permissions-are-necessary-for-truncating-a-table>



Integrating Twilio for Conversion Tracking with Your CF Web App

Getting Started

10. Make sure that you assign Execute permissions for all of the new Twilio Stored Procedures and Scalar Functions to the Logins that will need to execute.

Tip: you could create a database role that could be assigned to your logins that would have execute permissions on the new stored procedures/functions



Integrating Twilio for Conversion Tracking with Your CF Web App

Importing Data from Twilio using ColdFusion and SQL Server

1. Open **code/scheduledTasks/dailyTwilioImport.cfm**
2. Make a CFHTTP GET Request to the Twilio API for Calls

```
<cfhttp url="https://api.twilio.com/2010-04-01/Accounts/AccountSID/Calls.csv?PageSize=1000"
username="AccountSID" password="AuthToken"
name="VARIABLES.Twilio">
```

note: maximum number of records/request is 1000



Integrating Twilio for Conversion Tracking with Your CF Web App

Importing Data from Twilio using ColdFusion and SQL Server

3. Import Twilio data to a RawTwilio table first. This will allow you to:
 - Format the dates to be SQL compatible
 - Avoid importing duplicate records
4. Loop over the records in the RawTwilio table and import them to the RawTwilio table



Integrating Twilio for Conversion Tracking with Your CF Web App

Importing Data from Twilio using ColdFusion and SQL Server

5. Execute the **importTwilioData** stored procedure to process and import Twilio data to the Twilio table
6. Send a message to announce that the daily import was performed successfully.



Integrating Twilio for Conversion Tracking with Your CF Web App

Downloading data as a CSV file from Twilio using ColdFusion

1. - Open `code/scheduledTasks/dailyTwilioFileDownload.cfm`
2. Set 2 variables: one for the CSV file name and one for the path to store the CSV file in a CFSCRIPT block:
 - `VARIABLES.thisFile = 'Calls' & DateFormat(Now(), 'mmddyyyy') & '.csv'`
 - `VARIABLES.filePath = 'absolute path to the folder that will store downloaded Twilio files - example: D:\home\seattlecfug.org\TwilioFiles\';`



Integrating Twilio for Conversion Tracking with Your CF Web App

Downloading data as a CSV file from Twilio using ColdFusion

3. - Make a CFHTTP GET Request to the Twilio API for Calls. This will save the CSV file to the path you specified.

```
<cfhttp url="https://api.twilio.com/2010-04-01/Accounts/AccountSID/Calls.csv?PageSize=1000"
username="AccountSID" password="AuthToken"
file="#VARIABLES.thisFile#" path="#VARIABLES.filePath#">
```



Integrating Twilio for Conversion Tracking with Your CF Web App

Downloading data as a CSV file from Twilio using ColdFusion

4. - Send a message to announce that the daily CSV file download was performed successfully.



Integrating Twilio for Conversion Tracking with Your CF Web App

Generating Reports/Spreadsheets from Twilio Data

Now that we have Twilio data, we need to add intelligence to it. This can be done by mapping Twilio phone numbers to what is being tracked



Integrating Twilio for Conversion Tracking with Your CF Web App

Generating Reports/Spreadsheets from Twilio Data

SQL Server tables:

- TrackingType: includes all of the various types of marketing resources being tracked. Examples include:
 - Google My Business
 - Facebook
 - Number used in print materials and on vehicles



Integrating Twilio for Conversion Tracking with Your CF Web App

Generating Reports/Spreadsheets from Twilio Data

SQL Server tables:

- TrackingLocation: includes all of the locations being tracked.
- Tracking: maps Twilio phone numbers to locations and tracking types. Joined with the Twilio table for generating Metrics.



Integrating Twilio for Conversion Tracking with Your CF Web App

Generating Reports/Spreadsheets from Twilio Data

Demo of Twilio reports.



Next Month's Meeting

November 13, 2019 – 6:00 PM PST for in-person attendees;
6:30 PM PST for everyone (on-line attendees via Zoom).

- In-Person: We Work – Lincoln Square – Bellevue, WA – Conference Room 5C
- On-Line via Zoom: <https://zoom.us/j/872791549>

Topics include:

Debugging your application using Adobe ColdFusion 2018 by
Vinay Jindal



Questions/Answers/Help!

