360 SMS Time Zone Anything™

The optional **Time Zone Anything™** module solves the problem that Salesforce has no features whatsoever for national or international firms working with customers across multiple time zones. This problem manifests itself most often with text-based **Event Reminders** because Salesforce stores all Dates/Times in GMT (-5hrs from Eastern). It also presents a problem with Drip Campaigns that schedule SMS's and Emails based on time. By default, when a time is chosen, it's the Salesforce org time rather than the customers time, causing the text to be delivered to early or too late.

Thus, Salesforce developers around the world struggle to handle Date/Time in the customers time zone. The module adds a **Time Zone** and **Area/Country Code** object to the Salesforce org plus triggerable functions to use the area code or country code of a phone number to then lookup and set the default City, State, Country and most importantly Time Zone for new Leads or other use cases.

Additionally, the module comes with a set of common Date/Time formulas converting any Date/Time field to Text values for use in Merge Tags that reflect the Customers Time rather than the Salesforce Date/Time field, e.g. Appt_Cust_Time, Appt_Cust_DayOfWeek, etc. shown in **Figure 5** below. The tool also dynamically handles **Daylight Savings Time** on a per time zone basis as USA states like Arizona and Hawaii do not utilize DST and Europe starts/ends DST on different dates than the USA. Plus of course many countries do not use Daylight Savings Time at all.

		Country/Area Code	Region ↑		Country		Time Zone		City		State	Sender Number	
1	☐	65	APAC		Singapore		Asia - Southeast						
2	☐	64	APAC		New Zealand		New Zealand						
3	☐	61	APAC		Australia		Australia - Eastern		Sydney		NSW	61488845944	
4	☐	33	Europe		France		Europe - Central		Paris				
5	☐	49	Europe		Germany		Europe - Central		Berlin				
6	☐	38	Europe		Ukraine		Europe - Eastern		Kiev				
7	☑	44	Europe		UK		UK		London			441234480564	
8	☐	972	Middle East		Israel		Europe - Eastern						
9	☐	966	Middle East		Saudi Arabia		Europe - Eastern						
10	☐	212	North America		USA		Eastern		New York		NY		
11	☐	303	North America		USA		Mountain		Denver		CO	17206050632	
12	☐	310	North America		USA		Pacific		Los Angeles		CA	13103616046	
13	☐	312	North America		USA		Central		Chicago		IL		
14	☐	407	North America		USA		Eastern		Orlando		FL	19543889461	
15	☐	415	North America		USA		Pacific		San Francisco		CA	14154309940	
16	☐	602	North America		USA		Arizona		Phoenix		AZ		
17	☐	617	North America		USA		Eastern		Boston		MA		
18	☐	719	North America		USA		Mountain		Colorado Sprin...		CO	19704272935	
19	☐	720	North America		USA		Mountain		Denver		CO	17206050632	
20	☐	970	North America		USA		Mountain		Fort Collins		CO	19704272935	

Figure 1 - All Countries and Country Codes pre-loaded with Time Zones and the object is extensible to add your own fields. Here we've added a "Sender Number" column that when used with the SMS "Sticky Sender" feature dynamically uses the defined "local" number for large metropolitan areas thus giving a "local" presence to your SMS, CTI calling and Ringless Voicemail.
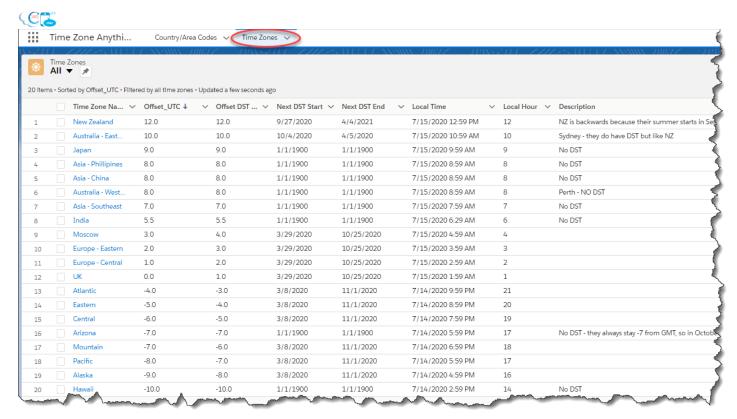
Time Zone Anythi...   Country/Area Codes ⌄   Time Zones ⌄

Time Zones
All ▼

20 Items • Sorted by Offset_UTC • Filtered by all time zones • Updated a few seconds ago

	Time Zone Na...	Offset_UTC ↓	Offset DST ...	Next DST Start	Next DST End	Local Time	Local Hour	Description
1	New Zealand	12.0	12.0	9/27/2020	4/4/2021	7/15/2020 12:59 PM	12	NZ is backwards because their summer starts in Se
2	Australia - East...	10.0	10.0	10/4/2020	4/5/2020	7/15/2020 10:59 AM	10	Sydney - they do have DST but like NZ
3	Japan	9.0	9.0	1/1/1900	1/1/1900	7/15/2020 9:59 AM	9	No DST
4	Asia - Phillipines	8.0	8.0	1/1/1900	1/1/1900	7/15/2020 8:59 AM	8	No DST
5	Asia - China	8.0	8.0	1/1/1900	1/1/1900	7/15/2020 8:59 AM	8	No DST
6	Australia - West...	8.0	8.0	1/1/1900	1/1/1900	7/15/2020 8:59 AM	8	Perth - NO DST
7	Asia - Southeast	7.0	7.0	1/1/1900	1/1/1900	7/15/2020 7:59 AM	7	No DST
8	India	5.5	5.5	1/1/1900	1/1/1900	7/15/2020 6:29 AM	6	No DST
9	Moscow	3.0	4.0	3/29/2020	10/25/2020	7/15/2020 4:59 AM	4	
10	Europe - Eastern	2.0	3.0	3/29/2020	10/25/2020	7/15/2020 3:59 AM	3	
11	Europe - Central	1.0	2.0	3/29/2020	10/25/2020	7/15/2020 2:59 AM	2	
12	UK	0.0	1.0	3/29/2020	10/25/2020	7/15/2020 1:59 AM	1	
13	Atlantic	-4.0	-3.0	3/8/2020	11/1/2020	7/14/2020 9:59 PM	21	
14	Eastern	-5.0	-4.0	3/8/2020	11/1/2020	7/14/2020 8:59 PM	20	
15	Central	-6.0	-5.0	3/8/2020	11/1/2020	7/14/2020 7:59 PM	19	
16	Arizona	-7.0	-7.0	1/1/1900	1/1/1900	7/14/2020 5:59 PM	17	No DST - they always stay -7 from GMT, so in Octob
17	Mountain	-7.0	-6.0	3/8/2020	11/1/2020	7/14/2020 6:59 PM	18	
18	Pacific	-8.0	-7.0	3/8/2020	11/1/2020	7/14/2020 5:59 PM	17	
19	Alaska	-9.0	-8.0	3/8/2020	11/1/2020	7/14/2020 4:59 PM	16	
20	Hawaii	-10.0	-10.0	1/1/1900	1/1/1900	7/14/2020 2:59 PM	14	No DST

Figure 2 – The Time Zone object comes with important fields for dynamically computing time and handles Daylight Savings Time everywhere

Contact
Steve Roch ⚬

Details   Activities   SMS Drips   Related Lists

Account	Bolder CRM	Owner	👤 Yash Ma
Name	Steve Roch	Last Activity +	7/15/2020
Title	President & CEO	Birthdate	
Email	steve@boldercrm.com	Email Opt Out	☐
Mobile	☏ (303) 875-7163	SMS Opt out	☐
Assistant		Drip Campaign ⓘ	Installer - Co
Asst. Phone	☏ (303) 974-8672	Stop Drip Campaign	☐

∨ Number Verification + Time Zone Anything™

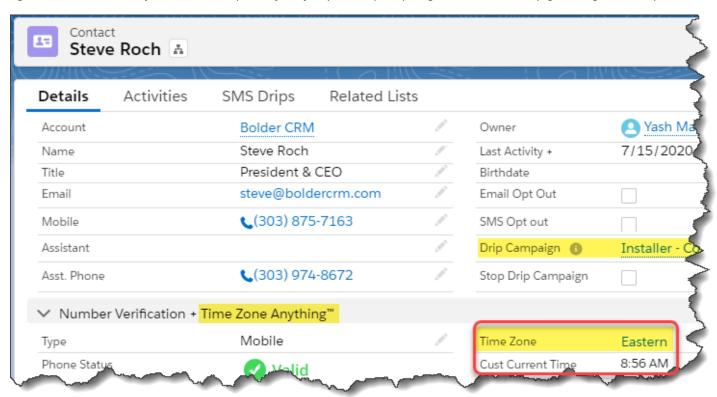|			
Type	Mobile	Time Zone	Eastern
Phone Status	✅ Valid	Cust Current Time	8:56 AM

Figure 3 - Add the Time Zone Lookup plus use the Area/Country Code tables to automatically compute the Time Zone

Drip Campaigns and Scheduled SMS

Time Zone handling is especially useful with the 360SMS Drip Campaign™ module, read more about Drip Campaigns here: SMS Drip Campaigns

When a Drip Campaign is designated as Time Zone Aware, then any drip messages that are defined for a specific time are adjusted to be scheduled so as to be delivered at the designated time based on the customer time zone.   A Scheduled_SMS.Scheduled_Time is always your Salesforce Orgs time so either manually or programmatically the user needs to make this adjustment in their head but with Time Zone Anything the Drip Campaign handles it automatically or developers triggering their own Schedule SMS's via APEX, Process Builder or Flows can tap into the Time_Zone. Offset_DST_Adjusted__c proprietary formula field to programmatically adjust time whenever they want.

Figure 4 - Here we show a 360SMS Drip Campaign that is Time Zone Aware so the Scheduled Time is adjusted to deliver the message at the defined time based on the customer time zone rather than the normal behavior of the Salesforce Time.

Event Reminders

Another common use case for making your Salesforce org Time Zone Aware is when sending Event Reminders either via triggered emails or via SMS. Refer to this guide for a deeper discussion of triggered SMS Event Reminders: Triggered Scheduled SMS - Event Reminders

When purchasing the Time Zone Anything™ these common formulas adjusted for the customer Time Zone are provided which are then useful as merge tags and the scheduling of the messages since time is always represented in GMT in Salesforce and therefore nightmare to communicate to the customer.

Figure 5 - Use Time Zone Anything to add pre-created Time Zone aware custom fields - we provide these common formula fields

Programmatic Use of Time Zone Anything

There are a variety of use cases when a Salesforce developer may want to use the features of the Time Zone Anything structure whether that be to use the Area/Country Code table to trigger specific country specific logic or use the Time Zone fields (especially Offset_DST_Adjusted__c) to manipulate time. Here is a brief example.

```
tdc.tsw__Scheduled_Time__c + Time_Zone__r.Offset_DST_Adjusted__c/24
```

About the Author

This document and most other 360 SMS documentation is maintained by our investment partner Steve Roch, CEO of Bolder CRM. Steve is an SMS Industry expert having worked or consulted with the top three SMS Apps on the Salesforce AppExchange and also having built the popular Salesforce app ActionGrid™, acquired by Conga in April-2016 and now renamed Conga Grid™. Bolder CRM is the exclusive distributor of 360 SMS in the United States, Canada and the United Kingdom.

Learn more about Steve and Bolder CRM at https://boldercrm.com/360SMS and https://www.linkedin.com/in/steveroch/

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