Area Code Matching SMS Numbers

Introduction

A common request from organizations is to want the SMS Sender Number to match a customer's area code so as to give the impression of a local number. This is easily accomplished with 360SMS because of its unique ability to define record specific SMS Sender Numbers in a formula field specifically named Sticky_Sender__c.

The only hard part of this is that the customers Area Code is not a native Salesforce field so we must create a formula field to hold it. Then we use the sticky sender formula to define a Case Statement mapping Area Codes to pre-purchased matching SMS Sender Numbers.

Area Code Formula

We actually recommend two formula fields but you can also combine these into one formula field if you like.

First we create a formula field for the customer MobilePhone (or whatever phone field you use) that strips out all special characters. This field can also be used in your Object Configuration as even though incoming SMS will match a large variety of phone formats a "clean" phone number is always best.

Figure 1 - Get a clean phone number without any special characters

For easy copy/pasting the formula is below, just change to your Phone field.

```
/* Strips out all special characters so we can know that the first 3
are the area code */
SUBSTITUTE(
SUBSTITUTE(
SUBSTITUTE(
SUBSTITUTE(
SUBSTITUTE(
SUBSTITUTE(
SUBSTITUTE(
SUBSTITUTE(   Phone ,
"(",""),
")",""),
" ",""),
"-",""),
"+1",""),
"+",""),
"x",""),
".","")
```

Figure 2 - Clean phone number formula text

Secondly, we create the Area Code formula field. For easy copy/pasting the formula text is on the next page.

Contact Custom Field
Area Code
Back to Contact Fields

Custom Field Definition Detail   Edit   Set Field-Level Security   View Fi

Field Information

Field Label	Area Code
Field Name	Area_Code
API Name	Area_Code__c
Description	Area Code formula used to compute the SMS sender numb

Formula Options

Data Type	Formula

IF(AND(ISNUMBER(LEFT(Phone_Unformatted__c,3)), LEN(Phone_Unformatted__c) = 1

LEFT(Phone_Unformatted__c , 3), /*simply grab the first 3 cuz it's a USA number*/

/* ELSE it's either not a number somehow, or it's a non-USA so we'll get the country code
LEFT(Phone_Unformatted__c , 2)
)

Figure 3 - Area Code formula field

```
IF( AND( ISNUMBER(LEFT(Phone_Unformatted__c,3)), LEN(Phone_Unformatted__c) = 10 ),

   LEFT(Phone_Unformatted__c , 3), /*simply grab the first 3 cuz it's a USA # */

   /* ELSE it's either not a number, or it's a non-USA so we'll get country code */

   LEFT(Phone_Unformatted__c , 2)

)
```

Figure 4 - Area Code formula field text

Record based Sender Number (Sticky Sender) Explained

360 SMS allows one to create a custom field named specifically **Sticky_Sender__c** (you can label it any way you like). This is a custom formula field that can hold any business logic that one wants, such as Geography-Based numbers, Record.Owner based numbers or in this case it will match an SMS Number to a customers Area Code.

If the Sticky_Sender field exists, all interface elements of the platform (Buttons and Conversation View) will override the current users Default SMS Number and instead offer this field value as the default. For example, a marketing user may want to select a large list of contacts for batch SMS but want the Sender Number to pull from the sticky sender. This also helps distribute batch SMS among multiple numbers thereby reducing spam detection.
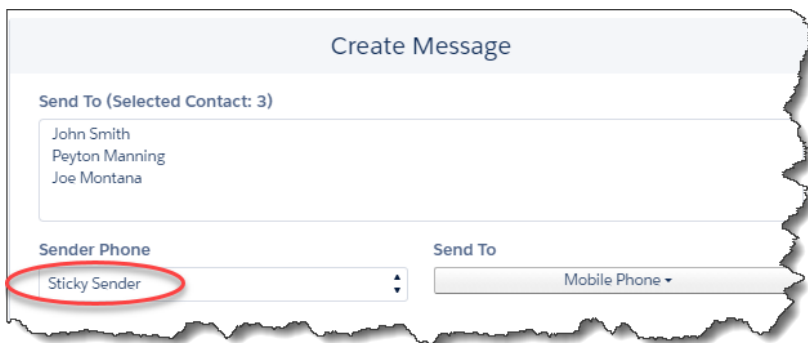
Figure 5 - When a sticky sender formula field is defined - it will default as the Sender Phone for batch, single and convo view

Programmatically, one references the Sticky Sender number field to make sure messages are coming from the correct number and to concentrate the business logic in the formula field.

Figure 6 - Use the sticky sender field for your Sender Number to be consistent and concentrate your business logic in the formula field

Sticky Sender formula

In this simplified formula we use a CASE statement from the new Area Code field to set the Sender Numbers that we have purchased. And if the area code doesn't match the ELSE portion of the CASE statement sets it to a 972 number.

Contact Custom Field

SMS Sender Num

Back to Contact Fields

Custom Field Definition Detail   [Edit] [Set Field-Level Security] [View Field Accessibility] [Where is this used?]

Field Information

Field Label	SMS Sender Num
Field Name	Sticky_Sender
API Name	Sticky_Sender__c
Description	Record Based SMS Sender Number matching customer area code with corresponding SMS Sender Number
Help Text	
Data Owner	
Field Usage	
Data Sensitivity Level	
Compliance Categorization	
Created By	Cagney McCormick, 11/28/2019 12:14 PM

Formula Options

Data Type	Formula

```
/*******************************************************************************
SR 11.28.19 - Record Based SMS Sender Number matching customer area code with corresponding SMS Sender Number

*******************************************************************************/
CASE( Area_Code__c ,
'214', '12149491117',
'469', '14693737477',
'972', '19724400469',

/*add more area codes and sender numbers when purchased*/

'19724400469')
```

Note that Salesforce has a 5,000 character limit on formula fields so with this customer we actually created an Area Code object and lookup field on the Contact and we use a combination Process Builder and Flow to lookup the area code. A few screen captures below:

Figure 7 - Use an Area Code object to map Area Codes to a corresponding local/regional Sender Number

Edit Contact Custom Field

SMS Sender Num

Custom Field Definition Edit		Save	Quick Save	Cancel

Field Information

Field Label	SMS Sender Num	
Field Name	Sticky_Sender	
Description	Record Based SMS Sender Number matching customer area code with corresponding SMS Sender Number	

Insert Field

SMS Sender Num (Text) =

```
/*****************************************************************************************
SR 11.28.19 - Record Based SMS Sender Number matching customer area code with corresponding SMS Sender Number
*****************************************************************************************

IF (NOT(ISBLANK( AreaCodeMatch__c )),

    /*THEN cleanup the sender number and add the 1 country code for USA*/
    '1' &
    SUBSTITUTE(
    SUBSTITUTE(
    SUBSTITUTE(
    SUBSTITUTE(
    SUBSTITUTE(
    SUBSTITUTE( AreaCodeMatch__r.Sender_Number__c  ,
    "(",""),
    ")",""),
    " ",""),
    "-",""),
    "+",""),
    ".",""),

    /*ELSE we can't find a matching area code so we'll use the 972 default */
    '19724400469'
)
```

Figure 8 - the new Sticky Sender formula

Figure 9 - Create a process builder on the Contact which calls a flow to populate Area Code Lookup
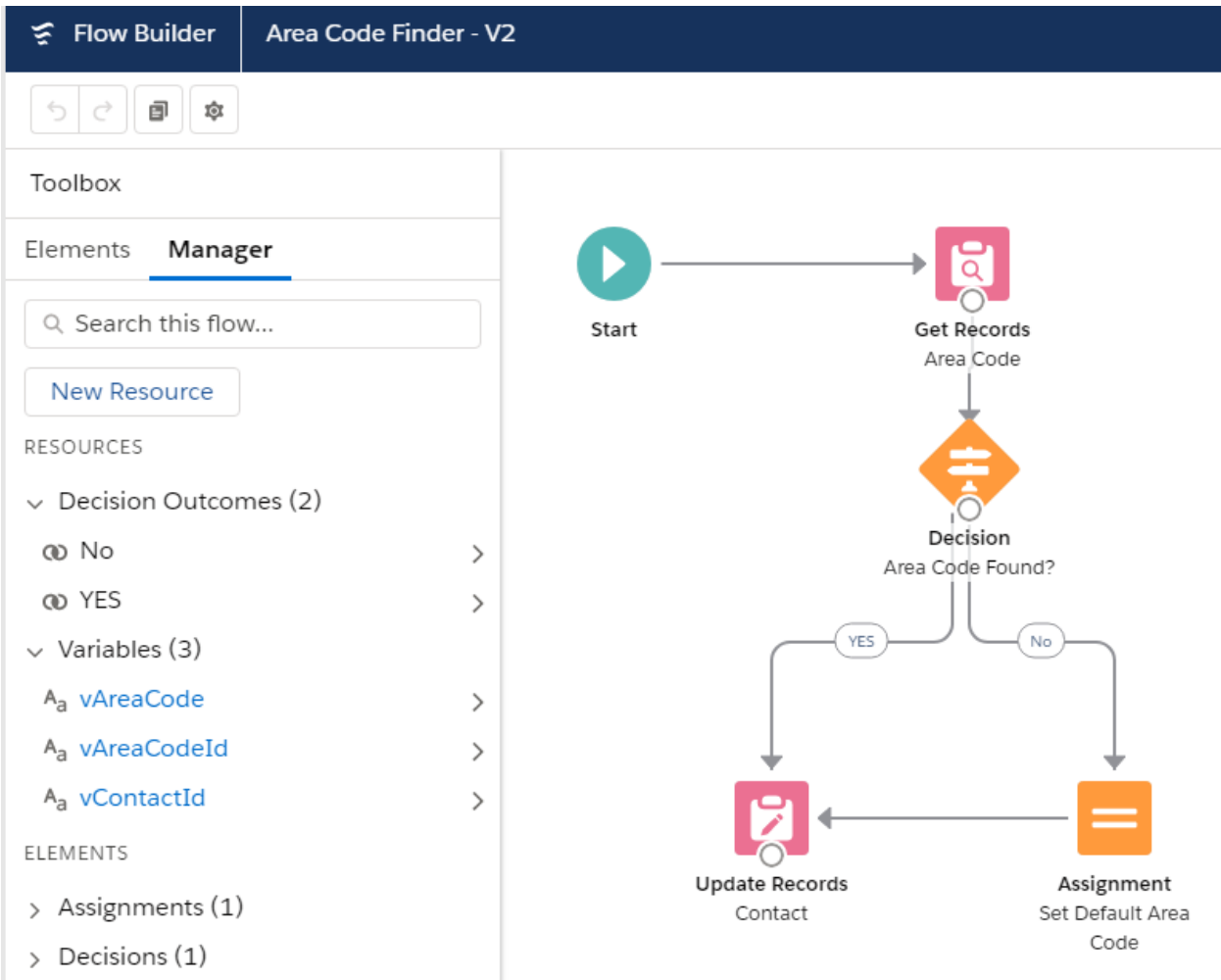
Figure 10 - Simple flow to lookup the area code from the Area Code table and update the Contact record Area_Code lookup field which in turn is used in the Sticky_Sender formula

About the Author

Steve Roch, CEO of Bolder CRM 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. 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://www.BolderCRM.com and https://www.linkedin.com/in/steveroch/