



Using Salesforce's Custom Notifications for true Push Notification Incoming SMS Alerts

360 SMS already has the industry's most robust alerting tools for Incoming SMS but new to the Salesforce Summer 2019 release is a Salesforce feature called **Custom Notifications** which unlike Chatter Notifications truly uses the phones native push notification feature to pop up a customizable message.

Eventually, 360SMS product will add this to its list of notification features, but until then this article will show how to create a simple **Process Builder** or **Flow** to send a push notification to the Phone or Desktop when an Incoming SMS arrives. **IMPORTANT:** Customers that allow 360SMS to configure their Orgs automatically receive this Process Builder/Flow. Note that one can push notify on any Salesforce event, so this is not just for Incoming SMS. Consider using this concept for key SMS ChatBot/Survey responses or key field updates.

360 SMS currently offers these notification methods invoked from the SMS Setup:

1. Email Notifications - The phone's email app (Outlook, Gmail) will pop-up its notification if turned on
 - a. Remember 360 SMS is the only platform to allow replying to the email notification, which sends an outbound SMS to the customer. The outbound sends to the customer and appears in the SMS Convo.
2. Utility Bar Incoming Alert component (Lightning Only)
3. Side Bar Incoming Alert (Classic only)
4. Chatter Notifications
5. Omni-Channel Notification and auto assignment to Agent
6. **Now let's add true Push Notifications – thanks to the power of the Salesforce Mobile team!**

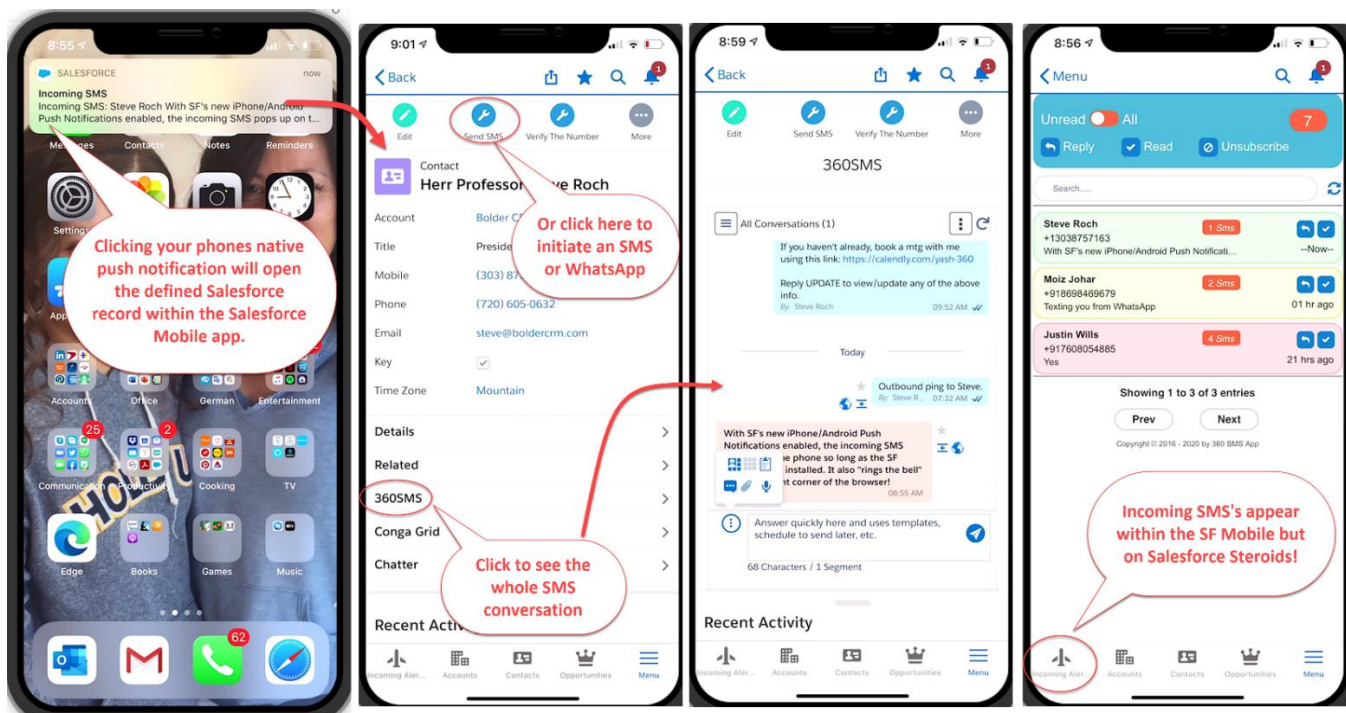


Figure 1 - This article teaches you how to do a real Push Notification that pops up on the cell phone or "rings the bell" on the Salesforce browser



Bolder CRM Push Notifications

If your 360SMS system was purchased and implemented by **Bolder CRM**, then Push Notifications are enabled by default and controlled by a checkbox on each User record.

All Users - LM/360

On this page you can create, view, and manage users.

In addition, download SalesforceA to view and edit user details, reset passwords, and perform other administrative tasks from your mobile devices: [iOS](#) | [Android](#)

View: All Users - LM/360 [Edit](#) | [Create New View](#)

<input type="checkbox"/>	Action	Full Name ↑	Alias	Title	Email	Phone	Mobile	SMS Number	Mobile Unformatted	SMS Push Notifications	Calendar Link
<input type="checkbox"/>	Edit Login	Aguisanda, Jerilee	agui							<input checked="" type="checkbox"/>	
<input type="checkbox"/>	Edit Login	Ahmad, Ali	AAhma	Outside Sales Agent						<input checked="" type="checkbox"/>	
<input type="checkbox"/>	Edit Login	Ali, Sammy	sali					+1		<input checked="" type="checkbox"/>	
<input type="checkbox"/>	Edit Login	Ayala, Yanitza	yayal							<input checked="" type="checkbox"/>	
<input type="checkbox"/>	Edit Login	Bandiaky, Jean	jband	Inside Sales Agent						<input checked="" type="checkbox"/>	

Figure 2 - Push Notifications are enabled on a Per User basis

Troubleshooting Push Notifications

Make sure that your Salesforce Mobile app is installed on the phone and that Push Notifications are enabled. See below.

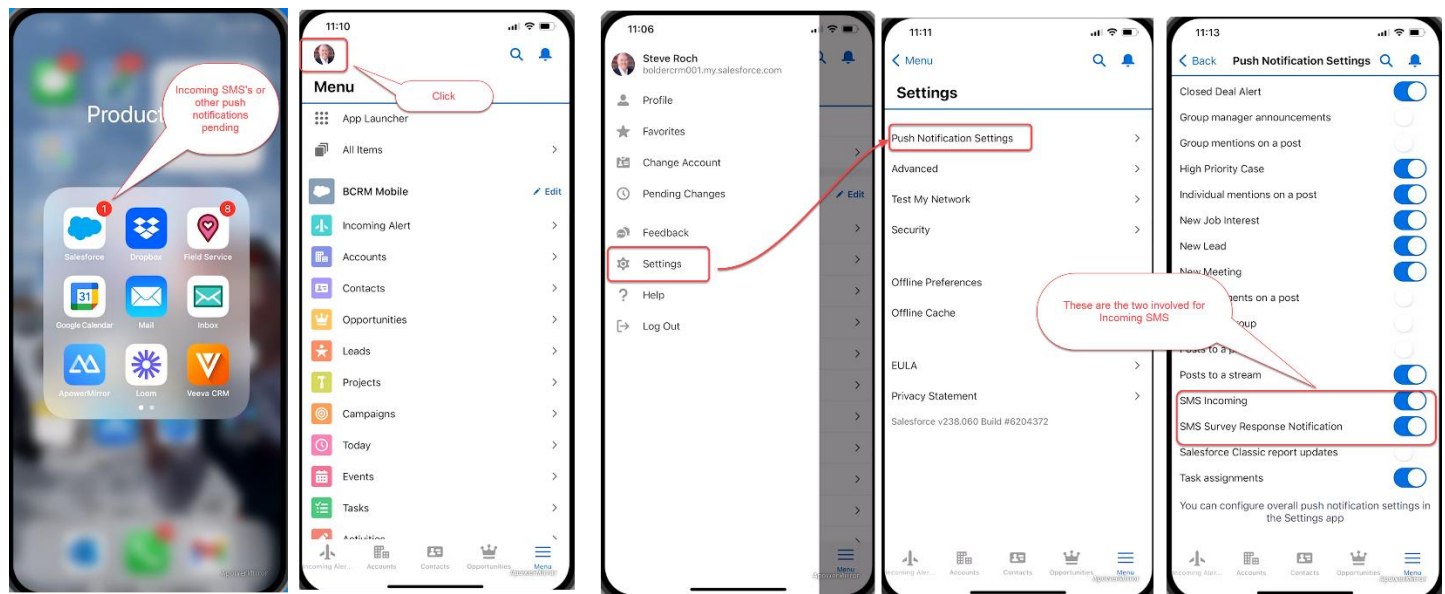


Figure 3 - Salesforce offers Push Notification on practically anything. Incoming SMS is just one of them and each user needs to make sure they are enabled on their personal device



Also make sure that the actual Phone has it's Push Notifications enabled for the Salesforce app. See below.

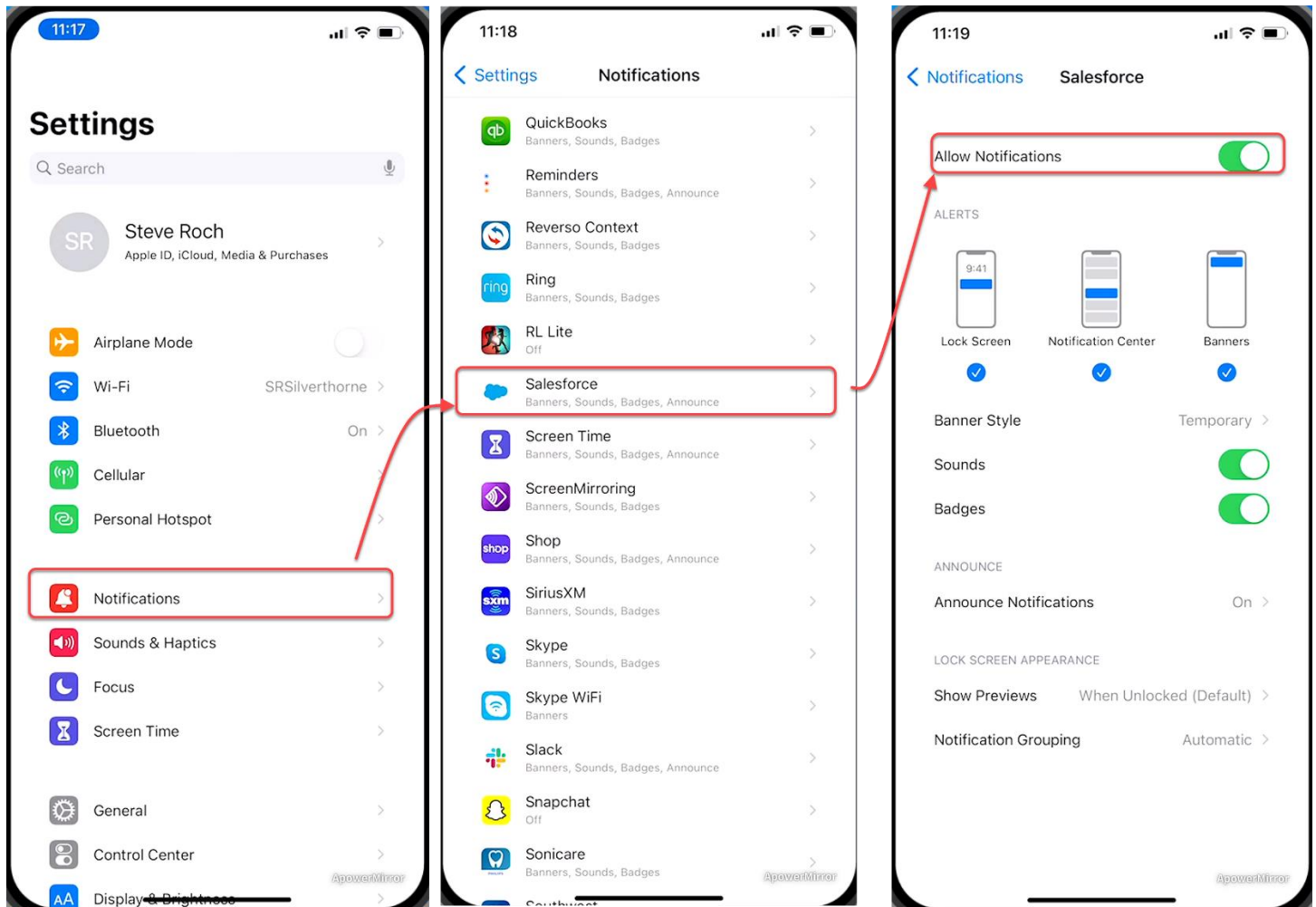


Figure 4 - Your personal phone may also require that you enable Notifications for the Salesforce App



Create a Custom Notification

Since the Summer '19 release, Salesforce now allows the creation of a custom notification type which appears as a choice in the Process Builder or Flow. Create a Notification Type from Setup → Notification Types.

Setup Home Object Manager

notification

Apps

- Mobile Apps
- Salesforce
- Environments
- Monitoring
- API Usage Notifications
- Notification Builder
 - Notification Types**

SETUP Notification Types

When you create and use custom notifications, the title and body of the custom push notification may be saved to and processed by Google, Microsoft and/or Apple. Salesforce is not responsible for the privacy and security practices of third-party systems or applications like Google Cloud Messaging or Apple Push Notification Service.

Custom Notification Types

Send custom notifications using Process Builder

NOTIFICATION NAME	API NAME	NAMESPACE	DESKTOP	MOBILE
SMS Incoming	SMS_Incoming		✓	✓
SMS Survey Response Notification	SMS_Survey_Response_Notification		✓	✓

Figure 5 - First create a custom notification type record

Then you must modify the **Notification Delivery Settings** to specifically enable it for iOS and Android devices.

Setup Home Object Manager

notification

Apps

- Mobile Apps
- Salesforce
- Environments
- Monitoring
- API Usage Notifications
- Notification Builder
 - Custom Notifications
 - Notification Delivery Settings**

SETUP Notification Delivery Settings

Salesforce Notification Types

- Activities
- Analytics
- Approvals
- Chatter
- Other

Custom Notification Types

Create custom notification types in Custom Notifications

Notification Type	Desktop	Mobile	Applications
SMS Incoming	✓	✓	Salesforce for Android, Salesforce for iOS
SMS Survey Response	✓	✓	

Edit Delivery Settings

Notification Type: SMS Incoming

Supported Channels

- ☒ Desktop
- ☒ Mobile

Applications

- ☒ Salesforce for Android
- ☒ Salesforce for iOS

Cancel Save

Figure 6 – You must specifically enable the notifications for iOS and Android devices



Process Builder

The process builder for an Incoming SMS push notification is extremely easy. There is a new action in the **Immediate Actions** to choose the **custom notification** you created in step 1. Then you can merge fields into the title and body of the notification.

The target object defines what record opens in the SF Mobile interface or the record which opens in the browser. The Salesforce FLOW interface has not quite caught up to this feature but read below for creating the custom notification via a FLOW which is especially useful if you want the Target Object to open to a different record than the SMS History.

Process Builder - SMS History - Incoming Push Notificat

START

SMS History

Incoming

TRUE

IMMEDIATE ACTIONS

Push Notification

+ Add Action

FALSE

Define Criteria for this Action Group

Criteria Name *

Incoming

Criteria for Executing Actions *

☐ Conditions are met

☒ Formula evaluates to true

☐ No criteria—just execute the actions!

Build Formula

Insert: Field Function System Varia... Operator

[tdc_tsw__Message__c].Name = 'Incoming'

/* uses Summer '19 push notification feature to "ring the bell" on desktop and send a real push notification to the phone. Much better than chatter notifications which cannot @notify the admin user and clutter up your chatter feed */

Send Custom Notification

Action Name *

Push Notification

Notification Type *

SMS Incoming

Notification Recipient *

Owner

[tdc_tsw__Message__c]

Notification Title *

Merge Field

Incoming SMS from: ([tdc_tsw__Message__c].[tdc_tsw__Sender_Name__c])

Notification Body *

Merge Field

Message: ([tdc_tsw__Message__c].[tdc_tsw__Message_Text_New__c])

Target Object *

tdc_tsw__Message__c Object that started the process

Owner

Use a FLOW if you want to open the Contact or Lead instead of



Flow - Open Contact/Lead instead of SMS History

Some customers prefer that the click to the Push Notification opens the actual Contact or Lead record (or custom object) rather than the SMS History which is the case with the Process Builder method due to Salesforce limitations with Process Builders. To work around the Salesforce Process Builder limitations use the **Flow** method below to accomplish this task. To be clear this method makes it so that when you click the notification from the Phone or the Bell icon in the browser, it will open the SMS_History.Related_Record_Id which is the primary record that the SMS History is related to.

IMPORTANT: Customers that allow BolderCRM/360SMS to configure their Orgs automatically receive this Process Builder/Flow in an unmanaged installable package. Bolder CRM assumes no liability and does not support the creation, debugging or teaching of flow technology without a consulting contract.

Big thanks to Narender Singh, Claire Jones and Christine Marshall whose articles below helped get through the awkward **Custom Notification Action** in Salesforce Flows:

[How to get the Id of a Custom Notification - ForcePanda Blog](#) (especially useful for Professional Edition)

[Custom Notifications in Flows - The Everyday Admin](#)

Our flow does one step better than these two articles as Salesforce lets us get the Custom Notification Id via a simple Get Records on the "Custom Notification Type" object, so that it is now completely without hardcoding of Ids.

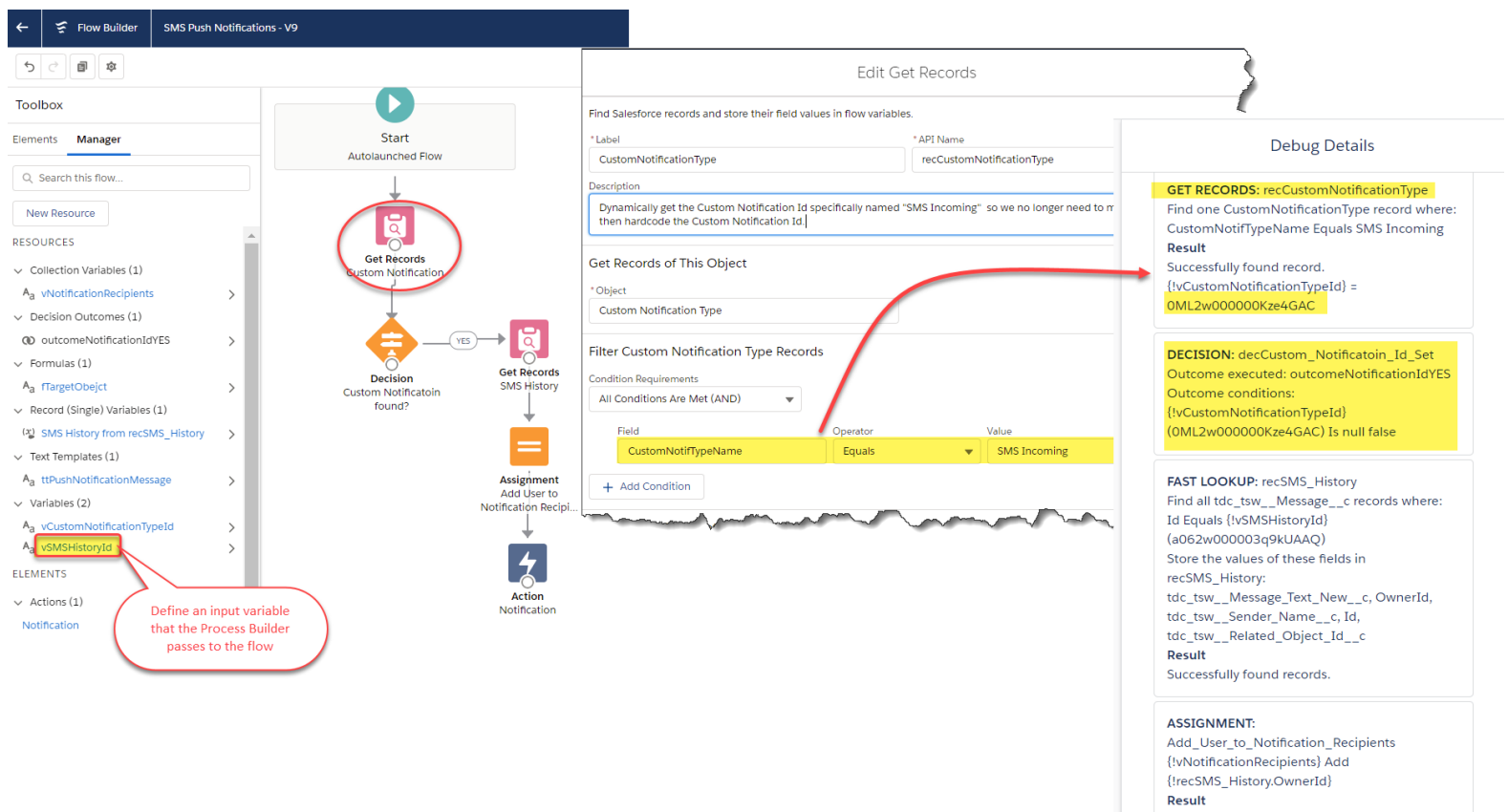


Figure 7 - Overview of the Flow - call the flow from the Process Builder passing in the **vSMSHistoryId** as an input variable.



Edit Variable

* API Name
vNotificationRecipients

Description
Per this article below, this needs to specifically be a Collection variable. We populate It from the User object.
<https://theeverydayadmin.com/2019/08/08/summer-19-new-feature-alert-have-you-combined-flow-custom-notifications-yet/>

* Data Type
Text ☒ Allow multiple values (collection)

Availability Outside the Flow
☐ Available for Input
☐ Available for output

Edit Assignment

* Label
Add User to Notification Recipients

* API Name
AddUserNotificationRecipient

Description
This obscure method is documented in the article below. We need to add the User(s) that will be used in the Custom Notification into a Collection Variable of type TEXT even though here we only have one user. Make sure to use the ADD operator.
<https://theeverydayadmin.com/2019/08/08/summer-19-new-feature-alert-have-you-combined-flow-custom-notifications-yet/>

Set Variable Values
Each variable is modified by the operator and value combination.

Variable	Operator	Value
{!vNotificationRecipients}	Add	{!recSMSHistory.OwnerId}

+ Add Assignment

Figure 8 - Create a collection variable to hold the "many" users that will be notified even though we are only notifying one person here but it would indeed notify others if you wanted to add that business logic. Then use the Edit Assignment flow control to add the User(s) to the variable.

Edit Text Template

* API Name
ttPushNotificationMessage

Description
Manufacture a Push Notification msg. The Push Notification Introduced In Salesforce Summer '19 push notifies on the Desktop and Mobile. Don't need to add a link to the Contact or Lead because the notification is automatically linked to the record and will open the record on the users mobile phone.

* Body
Insert a resource...

Incoming SMS from {!recSMSHistory.tdc_tsw__Sender_Name__c}
{!recSMSHistory.tdc_tsw__Message_Text_New__c}

important

Rich Text
✓ Plain Text

Figure 9 - Create a Text Template element via New Resource and manufacture the message that you want. We recommend using the Sender Name and the message. Make sure the msg is Plain Text or it will show with <p> and </p> tags like ill-formed HTML.



And now finally we can execute the Notification!

Toolbox

Elements Manager

Interaction (2)

Action

Subflow

Logic (4)

Assignment

Decision

Pause

Loop

Data (4)

Create Record

Update Record

Get Records

Delete Records

New Action

Filter By

Category

Account

Messaging

Notifications

Email

Approvals

Uncategorized

Edit "Send Custom Notification" core action

Use values from earlier in the flow to set the inputs for the "Send Custom Notification" core action. To use its outputs later in the flow, store them in variables.

* Label: Notification

* API Name: Notification

Description: Users the Custom Notification Feature of Salesforce - define the notification first in setup, then do a Get Records on the "Custom Notification Type" object to find it by name and get its ID which is needed first and foremost.

Set Input Values

A_a * Custom Notification Type ID: {!vCustomNotificationTypeId}

A_a * Notification Body: {!ttPushNotificationMessage}

A_a * Notification Title: Incoming SMS

A_a * Recipient IDs: {!vNotificationRecipients}

A_a Sender ID: ☐ Don't Include

A_a Target ID: {!rTargetObject} ☒ Include

A_a Target Page Reference: ☐ Don't Include

Cancel Done

SF does provide a pick list so yo must populate w/ the technique above

The Recipients Id only accepts a Collection variable (many Ids), which is why we had to define a variable as COLLECTION and ADD the one user to it.

Indicates the record that will open when the notification is click, so you can easily customize

Figure 10 - Create the Notification Action with the defined parameters.



Now Activate the Flow and call the Flow from the Process Builder Immediate Action.

The screenshot shows the Salesforce Process Builder interface for a process named 'SMS History - Incoming Push Notificat'. On the left, a flow diagram shows a 'START' node leading to an 'SMS History' node, then to a decision diamond labeled 'Incoming'. The 'TRUE' path leads to an 'IMMEDIATE ACTIONS' box containing a 'Push Notification' action. A red arrow points from this 'Push Notification' action to the 'Launch a Flow' configuration panel on the right. In this panel, the 'Action Name' is set to 'Incoming Push Notification'. The 'Flow' dropdown is set to 'SMS Push Notification'. Under 'Set Flow Variables', a row is configured with 'Flow Variable' as 'vSMSTHistoryId', 'Type' as 'Field Reference', and 'Value' as '[tdc_tsw__Message__c].Id'. The 'Build Formula' section shows the formula '[tdc_tsw__Message__c].Name = \'Incoming\'' with a comment: '/* uses Summer \'19 push notification feature to "ring the bell" on desktop and send a real push notification to the phone. Much better than chatter notifications which cannot @notify the admin user and clutter up your chatter feed */'.

Figure 11 - Call the flow from the Immediate Action instead of using the Process Builder "Notifications" action



Make it a User Preference

In my world no two users always agree on the same thing, so consider modifying the calling Process Builder ever so slightly to make it a **user preference**. This is also nice to turn off your Push Notifications right before a Big Batch SMS goes out unless you want your phone constantly chiming with the sound of incoming money. 😊

Two quick steps:

1. Add a field to your USER object such as **SMS Push Notifications** (checkbox defaulted to Checked)
2. Add a line to your Process Builder criteria checking SMS_History.Owner.SMS_Push_Notifications = True

Figure 12 - Add a user field

```
[tdc_tsw__Message__c].Name = 'Incoming'  &&
[tdc_tsw__Message__c].Owner:User.SMS_Push_Notifications__c = TRUE

/*****
Uses SF's Summer '19 push notification feature to "ring the bell" on desktop and send a real push
notification to the MobilePhone. Much better than Chatter notifications which cannot @notify the
admin user and clutter up your chatter feed
*****/
```

Figure 13 – Modify the criteria of your process builder referenced in Figure 11 to add the reference to the User.SMS_Push_Notifications



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 and now renamed **Conga Grid™**. Bolder CRM is the exclusive distributor of 360 SMS in the United States, Canada and the United Kingdom.

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