

# Block specific inbound numbers in Architect

## Block specific inbound #s in Architect

### Purpose:

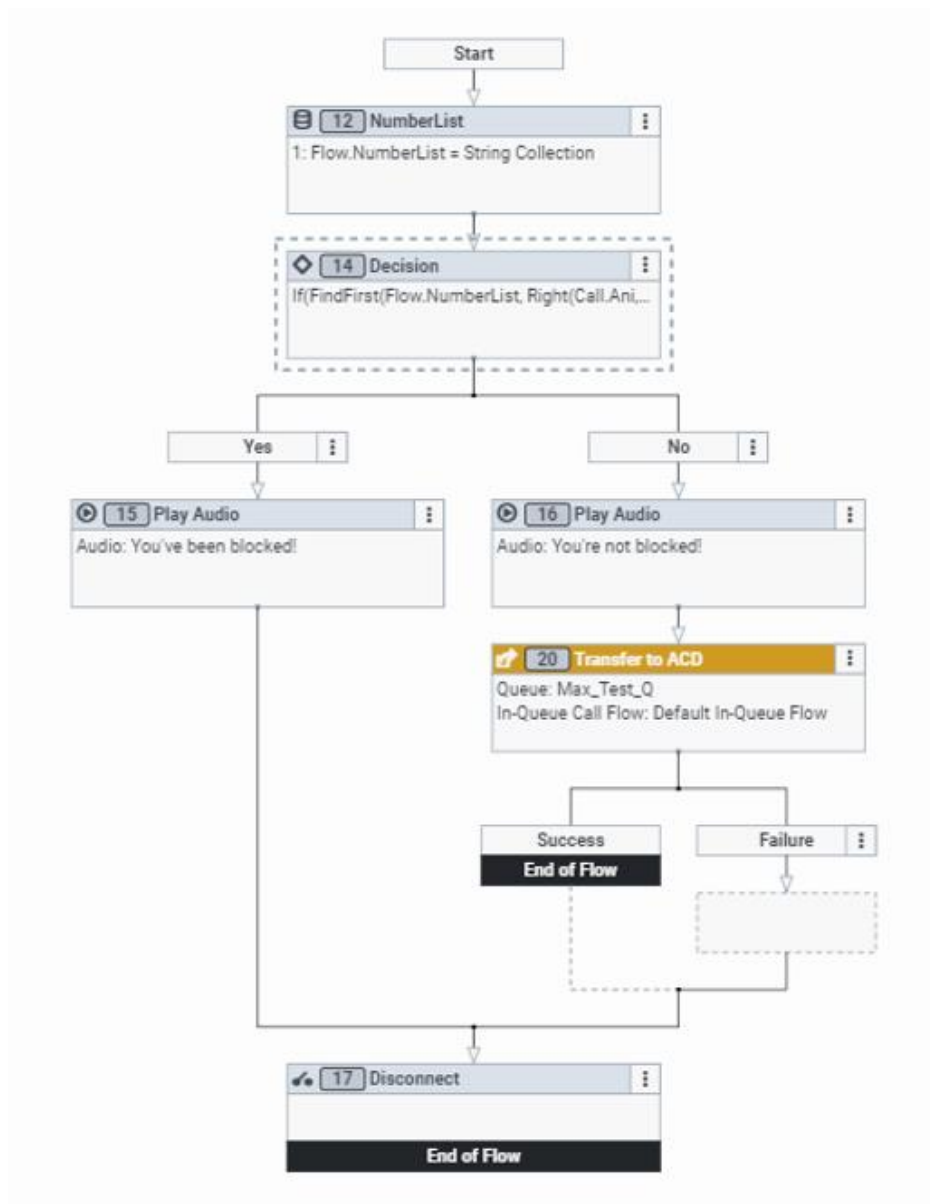
There are often situations where customers want to block incoming calls from a specific number or numbers. This page provides a quick overview of how to build a call flow in Architect that will disconnect a call from any numbers listed in the 'Number List' while allow all other calls to pass through. **NOTE** This process will NOT work to block outgoing calls to these same numbers.

### Can these steps be provided to customers?

Yes, this information can be shared with customers. As of the writing of this page we are in the process of updating the Resource Center to contain an article that outlines this, but for now feel free to share this information with customers who request it.

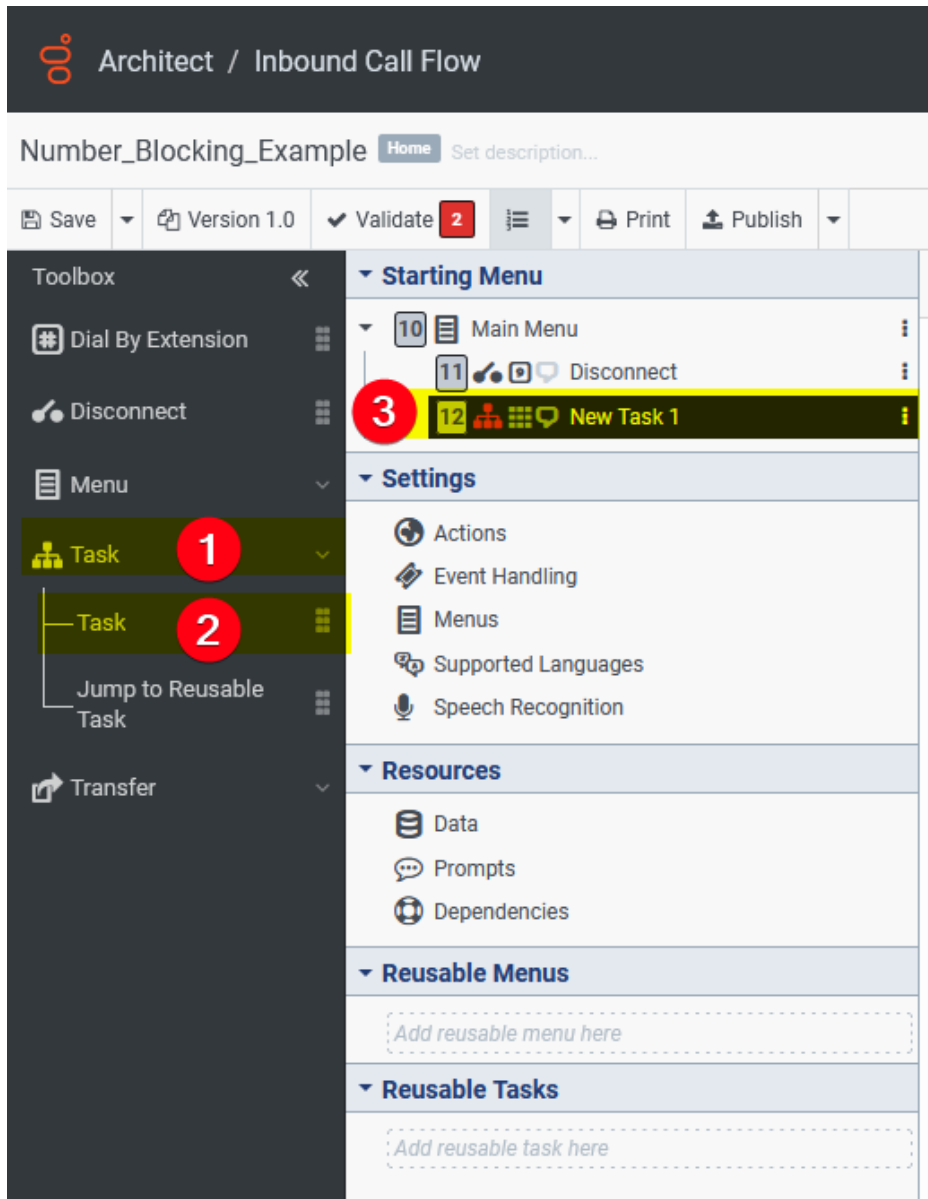
### How to build the # blocking flow

**Example:** Before we look at building the flow, here is a sample version of what we'll be building. **NOTE** The 'Play Audio' steps are optional.



1. Create a new inbound call flow, or open an existing flow to be edited. **NOTE** These steps will need to be followed for each call-flow that requires number blocking.

2. Add a 'Task' to your flow by dragging the 'Task' item from the toolbox to the 'Starting Menu'.



3. Give the task a name, and assign a DTMF option to it. **NOTE** The name and DTMF digit select do no matter for our example, but may matter if adding this to an existing

customer flow.

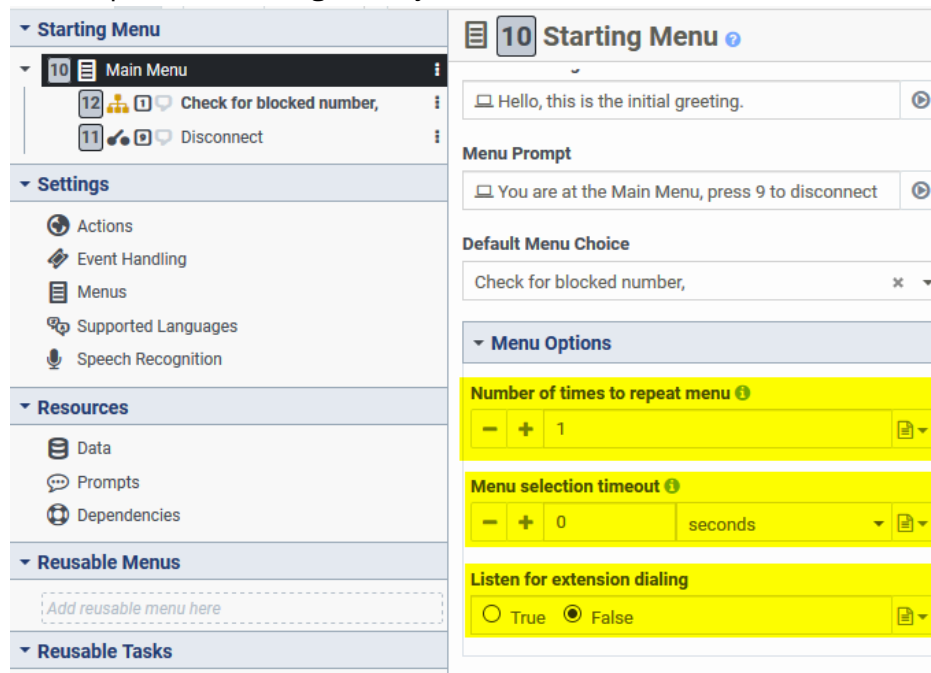
The screenshot shows the configuration for a task named '12 Task'. On the left, a sidebar lists menu items: 'Starting Menu' (containing '10 Main Menu', '12 Check for blocked number', and '11 Disconnect'), 'Settings' (containing 'Actions', 'Event Handling', 'Menus', 'Supported Languages', and 'Speech Recognition'), and 'Resources'. The main panel is titled '12 Task' and contains a 'Name' field with the value 'Check for blocked number'. Below this is a 'DTMF' section with a 'Speech Recognition' sub-section containing a '1' in a yellow box and a text input field 'Enter speech recognition terms'. There is also a checkbox for 'DTMF goes to this menu choice from any menu' and a 'Click to open' button.

4. Set the 'Default Menu Choice' to the name of the task created in the previous step.

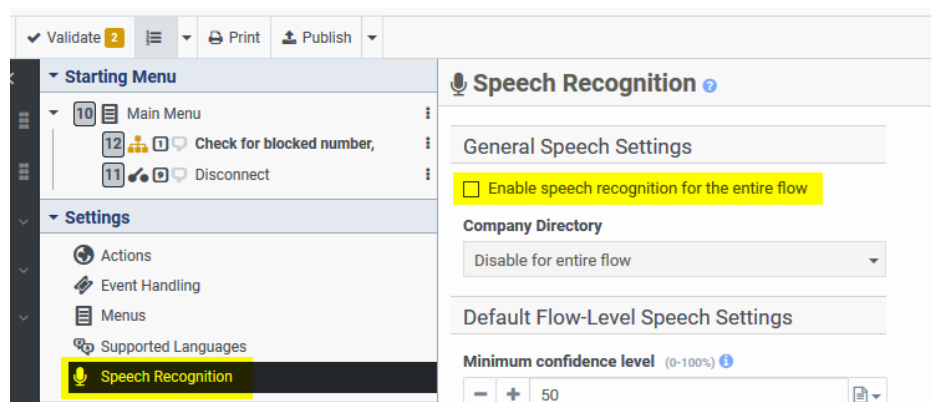
The screenshot shows the configuration for a 'Starting Menu' named '10 Starting Menu'. The left sidebar is similar to the previous one but includes 'Resources' (Data, Prompts, Dependencies), 'Reusable Menus', and 'Reusable Tasks'. The main panel contains fields for 'Name' (Main Menu), 'Initial Greeting' (Hello, this is the initial greeting.), and 'Menu Prompt' (You are at the Main Menu, press 9 to disconnect). The 'Default Menu Choice' dropdown is highlighted in yellow and shows three options: 'None (disconnect the interaction)', 'Disconnect', and 'Check for blocked number'. Below this are fields for 'Number of times to repeat menu' (set to 3) and 'Menu selection timeout' (set to 10 seconds). There is also a 'Listen for extension dialing' checkbox.

5. Set the 'Number of times to repeat menu' to '1', the 'Menu selection timeout' to '0', and set 'Listen for extension dialing' to 'False'. These settings will make sure that the

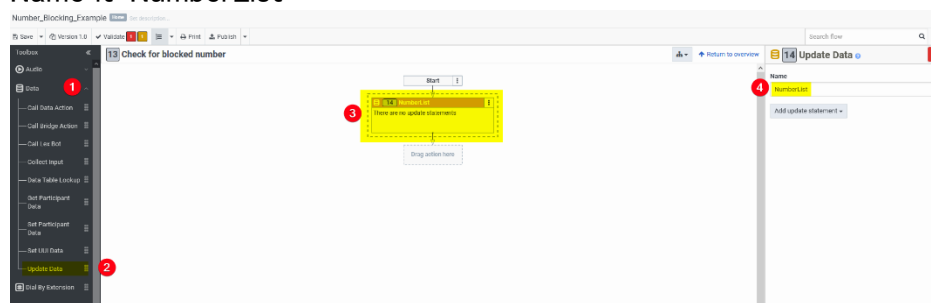
default path is taken right away.



6. Disable Speech Recognition by un-checking the 'Enable speech recognition for this entire flow'.



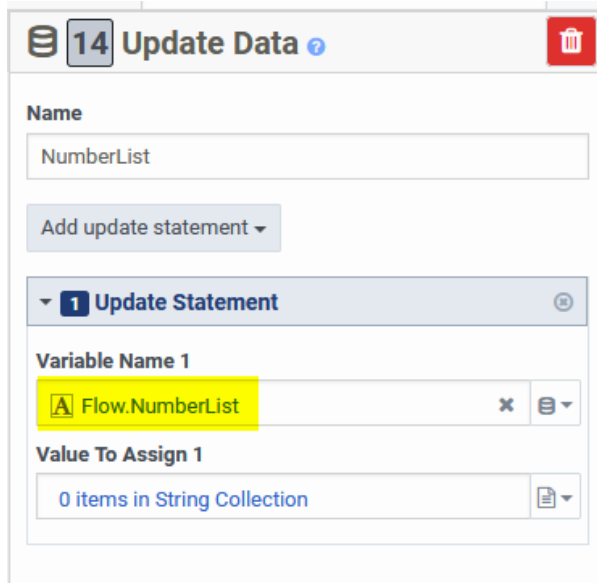
7. You may also wish to modify the 'Initial Greeting' and 'Menu Prompts' depending on if this is for a customer or just a test.
8. Open the task created and drag an 'Update Data' task from the toolbox to the task. Name it 'NumberList'



9. Select the drop-down for 'Add update statement' and click the checkbox for 'Create Collection'. Then select 'String Collection'

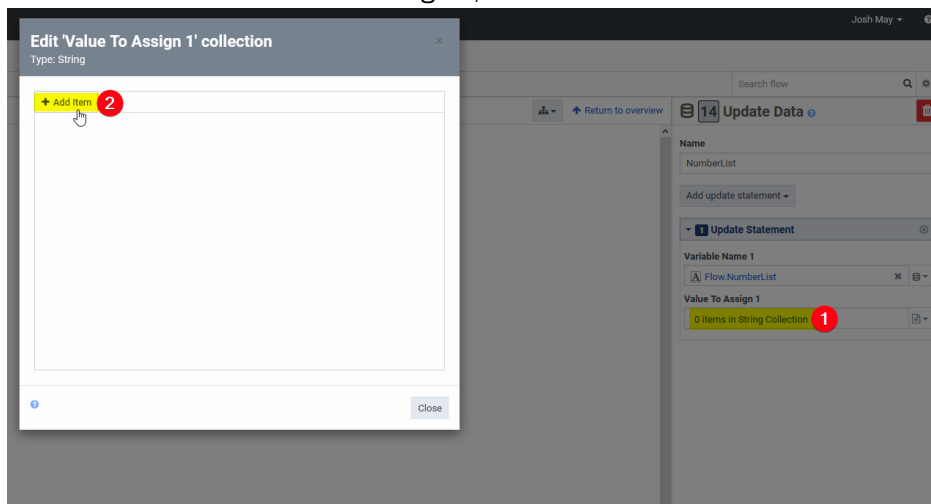
The screenshot shows a dialog box titled '14 Update Data' with a trash icon in the top right corner. Below the title bar, there is a 'Name' field containing the text 'NumberList'. Below this field is a yellow button labeled 'Add update statement' with a small upward-pointing triangle. A red circle with the number '1' is next to this button. A dropdown menu is open below the button, showing a list of collection types. The first item in the list is 'Create Collection' with a checked checkbox, highlighted in yellow, and a red circle with the number '2' next to it. Below this is a list of collection types, each with an icon and a name: 'ACD Skill Collection', 'AgentScorePair Collection', 'Boolean Collection', 'Currency Collection', 'DateTime Collection', 'Decimal Collection', 'Duration Collection', 'Group Collection', 'Integer Collection', 'Language Skill Collection', 'PhoneNumber Collection', 'Prompt Collection', 'Queue Collection', 'String Collection' (highlighted in yellow with a red circle with the number '3' next to it), 'User Collection', and 'WrapupCode Collection'.

10. Enter 'Flow.NumberList' as 'Variable Name 1' then hit the enter key.



The screenshot shows the 'Update Data' configuration window. The 'Name' field is set to 'NumberList'. Below it is a button 'Add update statement'. Under the '1 Update Statement' section, the 'Variable Name 1' field contains 'Flow.NumberList' and is highlighted with a yellow box. The 'Value To Assign 1' field shows '0 items in String Collection'.

11. Click the text in 'Value To Assign 1', then select 'Add Item'

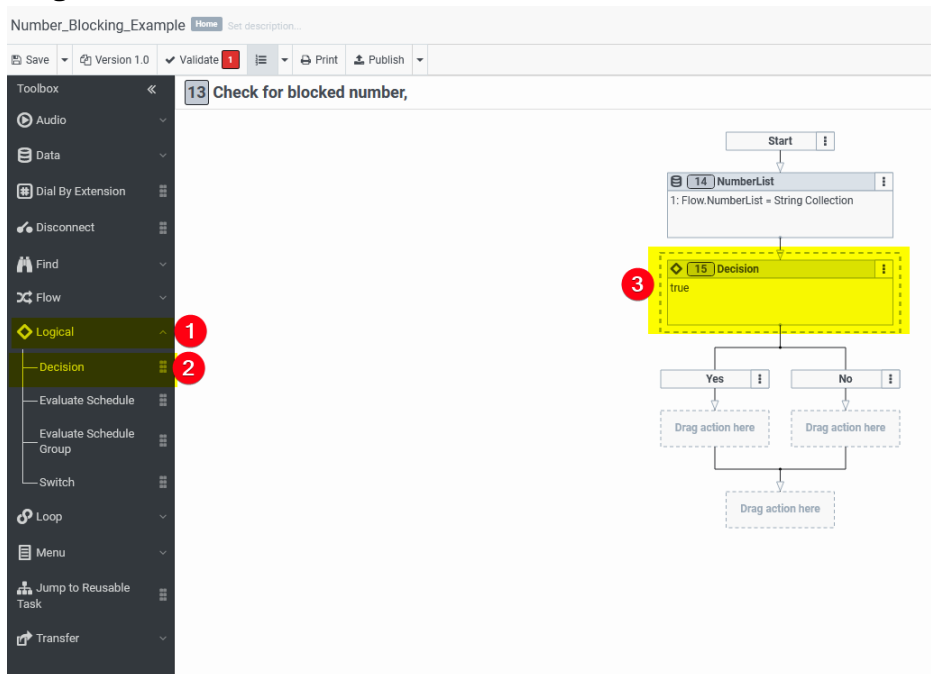


The screenshot shows two overlapping windows. The foreground window is titled 'Edit 'Value To Assign 1' collection' with 'Type: String'. It has a '+ Add Item' button highlighted with a yellow box and a red circle with the number '2'. A hand cursor is pointing at the button. The background window is the 'Update Data' configuration window, where the 'Value To Assign 1' field is highlighted with a yellow box and a red circle with the number '1'.

12. Enter the first number you wish to block. Then select close. **NOTE** Only one number can be added per 'item'. Use the 'add item' button to add more blocked numbers.

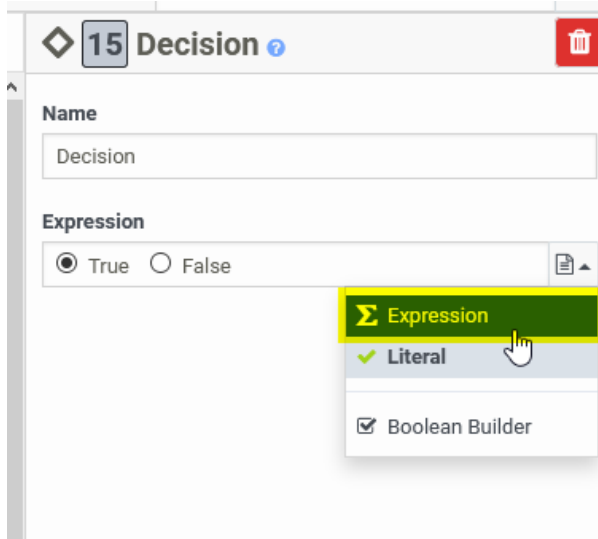
The screenshot shows a dialog box titled "Edit 'Value To Assign 1' collection" with a close button (X) in the top right corner. Below the title bar, it says "Type: String". Inside the dialog, there is a list with a header "+ Add Item" and a single item labeled "0 Item" with the value "13174026822". To the right of the value is a document icon with a dropdown arrow. At the bottom left is a question mark icon, and at the bottom right is a yellow "Close" button.

13. Drag a 'Decision' item from the toolbox to the task.

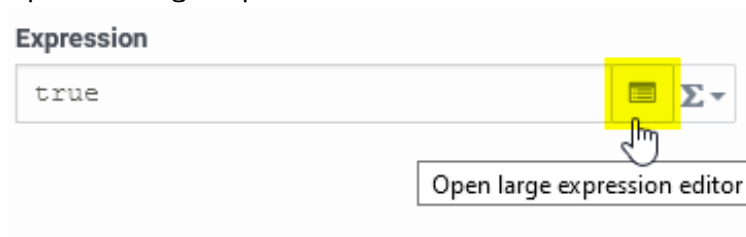




14. Change the 'Expression' of the 'Decision' from 'Literal' to 'Expression'

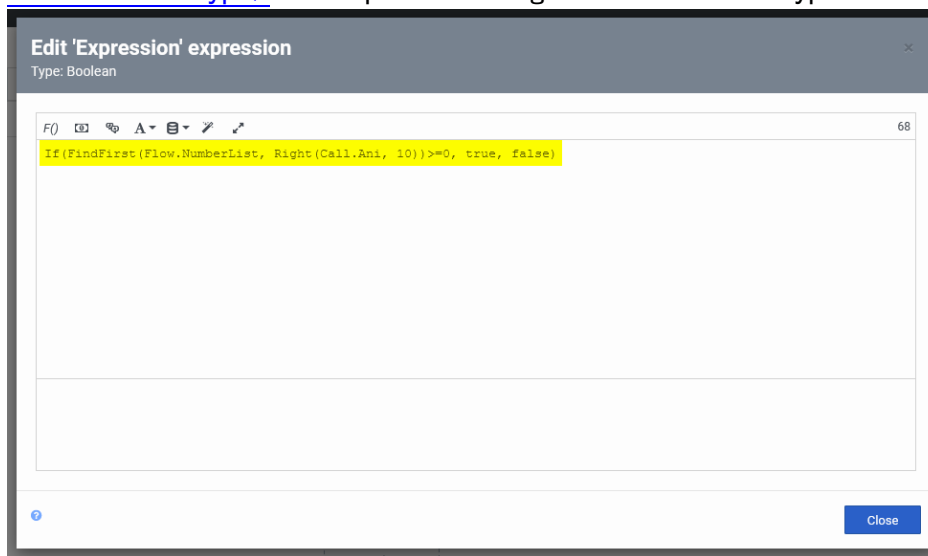


15. Open the large expression editor.



16. Enter the expression 'If(FindFirst(Flow.NumberList, Right(Call.Ani, 10)))>=0, true, false)'  
**NOTE** This expression is setup for 10 digit numbers in the US. If you need to set this up for another country please reference

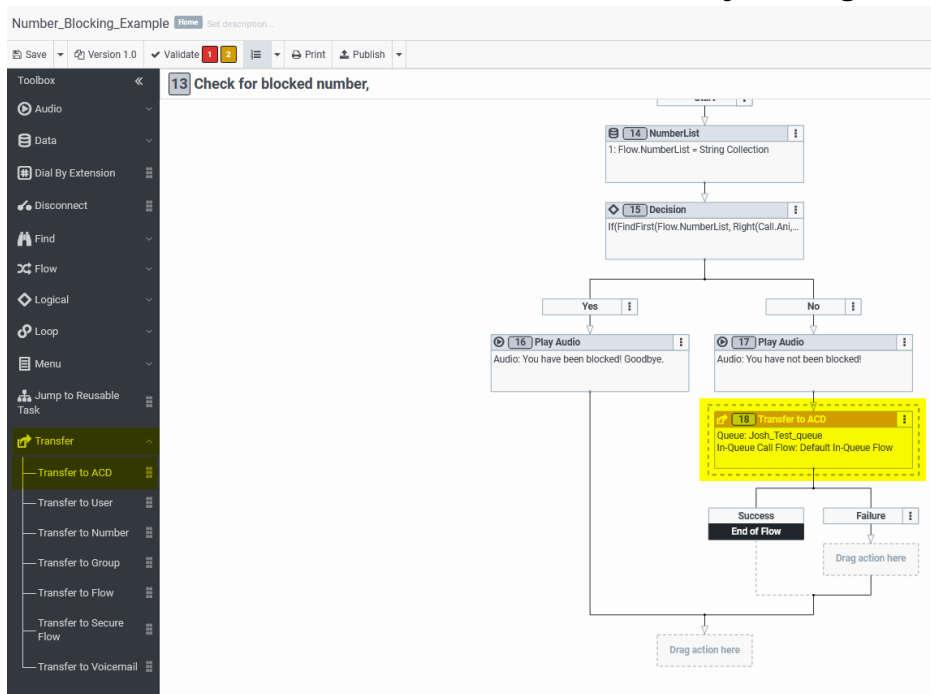
<https://help.mypurecloud.com/articles/about-variables-and-expressions/> for expression help and <https://help.mypurecloud.com/articles/about-the-phone-number-data-type/> for help determining the correct data type.



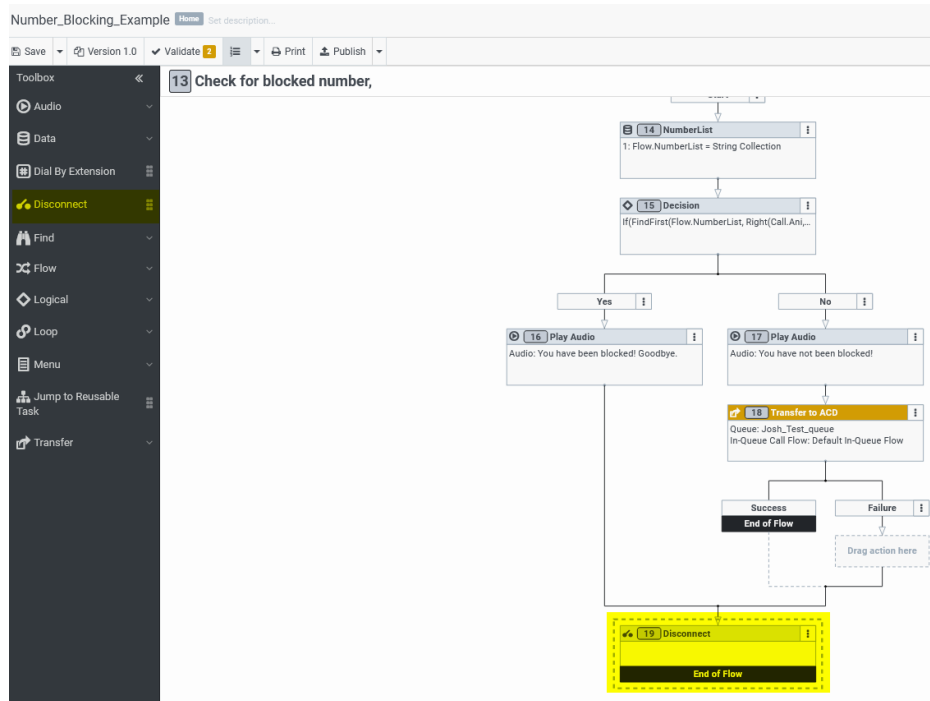
17. Drag two 'play audio' objects from the toolbox to the task, then enter the text you wish to read to the caller. The 'Yes' audio will be for calls that match the list and are blocked. The 'No' audio will be for calls that did NOT match the list and are not blocked. **NOTE** These play audio objects are optional.



18. Drag a 'Transfer to ACD' object from the toolbox and add it just below the 'No' play audio. Then select a queue to transfer the call to. **NOTE** You can replace this Transfer to ACD with another action if desired. We're just using this as an example.



19. Drag a 'Disconnect' action from the toolbox to the end of your flow.



20. Save and publish your call flow. Now all you need to do is assign a number to the flow, then call it from a number in the blocked list to test!