# Setting up a Webex visual IVR using the CallVU studio

Follow the guidelines below to setup a visual IVR using the Webex Flow Designer and the CallVU studio. Using CallVU, your Webex visual IVR will have the power to send visual screens and play voice messages in parallel during the flow.

- 1. Create your CallVU tenant browse to <a href="https://studio.ficx.app/">https://studio.ficx.app/</a> and create your tenant
- 2. Enter your tenant's studio by browsing to https://studio.ficx.app/callvu-studio/
- 3. In the studio, click the New Project button and create a Micro App



- 4. Setup your micro app flow (journey) as explained in <a href="https://ficx.gitbook.io/ficx-studio">https://ficx.gitbook.io/ficx-studio</a>
- 5. On the upper right corner, click on the down arrow and enter Settings



- 6. Copy the values of the Organization ID and the Access Token
- 7. Create a connector in the Webex portal
  - Log in to your customer organization at <u>https://admin.webex.com</u> and navigate to Services > Contact Center > Integrations
  - b. Add a Custom Connector
    - i. Assign a name to it, for example, CallVUConnectorv1
    - ii. Select Basic Authentication
    - iii. Set the Resource Domain to: <u>https://studio.ficx.app/VIVR</u>
    - iv. In the User Name paste the Organization ID copied in step 5
    - v. In the Password paste the Access Token copied in step 5
    - vi. Set the validation URL to <a href="https://studio.ficx.app">https://studio.ficx.app</a>
    - vii. Activate the connector
- To create a flow using the Webex Flow Designer and initiate your tenant's visual journey created by the CallVU Studio, in the Webex Flow Designer start a new flow and set the following string variables

Flow Variables			
View All Variables	$\sim$		
Q token × started ScreenDisplayed ×	×	လှ CallerANI	×
Add Flow Variable			

Set the default values of token and started to false

9. Assign the variable CallerANI with the value of {{NewPhoneContact.ANI}}

(x) SetVariable_ob9 Set Variable Activity Settings	×
Enter a Set Variable Description.	
	li
Variable Settings	^
Variable	
Q CallerANI	~ ]
Variable Value	
Set Value	
{{NewPhoneContact.ANI}}	
	<b>W</b> <sub>1</sub>
If typing variables in an expression, use this	syntax: {{variable}}
Set To Variable	

10. Add a menu block with a voice prompt inviting customers to receive a text message to start the visual journey, for example, Welcome.wav will say "to easily complete your transaction, press 1 and we will send you a text message. Click on the link in the message to start your journey"

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																					Enable Text-to-Speech
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		CallerA	NI = {{New	PhoneC				No de	scriptic	n defin	ed										can also use SSML to construct the message. If typing variables,
		Error Ha	ndling	~				Custor	n Links		^									-	use this syntax: {{ variable }}.
		Undefi	ned Errors					1	ser	nd sms		-									Add and ar mare cudic flee to play in a sequence
		·						O Ad	d Nev	,										•	Add one of more addio mes to play in a sequence.
			• •	• •				Error H	landling		^										1 Audio File
			NewPho Start Flow	v v	•			No-I	nput Ti	meout		-				Sor	d lo	•			
		Event	= NewPho	neContac	t 🞸			Unm	atched	Entry			 	$\rightarrow$		HTT	'P Req	uest	1		
								Unde	afined I	rror				· .	Send a	a jour.	ney				
								Unde	nneu c												Add Audio File Add Audio Variable
					• •		•	• •			•		 •			•	• •	•			Make Prompt Interruptible
					Ch	eckT	oken														Allow an input or event to interrupt the message before it ends.
				~ ~	Co	ndition	1														
				. {(to	ken==fa	lse}}													$\rightarrow$	8.	

11. In this case, if the caller presses 1 the flow will advance to the Send\_Journey HTTP Request block. In this block an API request to SetDynamicDisplayJson will be made using the connector that will send an SMS to the calling number and initiate the visual IVR experience.

Send_Journey HTTP Request Activity Settings	×
HTTP Request Settings	^
Use Authenticated Endpoint	
Connector ①	
Q CallVUConnectorv1	~
Request Path ①	
/SetDynamicDisplayJson	
Method	
Q GET	~

12. Use the following parameters when calling the initial SetDynamicDisplayJson API are:

Кеу	Value	
Folder	folder	Ô
CallPhase	Pre-IVR	Ô
PhoneNumber	{{CallerANI}}	Ô
File	start	Ô
Token	starthtml5	Ô
UrlSlug	24671071-EE38-4F7C	Ô

The UrlSlug value is the unique identifier of the Micro App created in the CallVU Studio.

In order to retrieve it, open the CallVU Studio and preview the Micro APP

- Click the 3 dots on the micro app's button and select Preview



- In the Preview screen, select the Integrate tab

Text Email Scan Integrate

Copy the UrlSlug value of the VIVR Integration URL. Clicking the button will copy the entire text in the black window.

https://stu	dio.ficx.app/VIVR/SetDynamicDisplayJson?
Dnis=DSQWY	ATbrZ2H&TID=7d776e4b-840f-4b76-83ef-
821faefd45	d&ts=1715171965541&Token=starthtml5&CallPhase=Pre-
IVR&Folder	-folder&File=start&PhoneNumber=PHONE-
NUMBER&acco	ess_token=ACCESS-TOKEN
* Replace 1	PHONE-NUMBER with the ANI
** Replace	ACCESS-TOKEN with the access_token value in the
	reen

- Use this UrlSlug value in the Flow Designer's http request
- 13. Set the following for the response. The token variable will get a unique session identifier in case the visual session has successfully started, otherwise, it will get false.

Send_Journey HTTP Request Activity Setting	ngs	×
Response Timeout 🛈	10000	milliseconds
Number of retries 🛈	1	
Parse Settings		^
		$\sim$
Output Variable		
Q token		$\sim$
Path Expression ①		
\$.token		7

14. Add a voice message saying the message has been sent



15. Add a condition to check if the token is false

4	<sup>7</sup> Event Flows	⑦ Help	1					2 :	Sea	arch	ו Fl	ow		Ctrl	К		ج م	2	CheckToken Condition Activity Settin	ngs	×
	OhaaliTaliaa	——————————————————————————————————————															~~		Description		
	Condition	•															(	Cheo	ck if token is false		
	{{token==false}}	•													Γ						li
	True		• [	•	•••	•	$\rightarrow$		ls H	s <b>Clie</b> ITTP	entS Rec	Starte juest	ed	-	1		Fue				
	False	_					. /	Vo de	scr	riptio	n de	efined					ΕXμ	Jies	SION		~
	Error Handling	^	•														Wri	ite a	n expression for the	activity to evalua	ate as True or False.
	Undefined Errors	-	- I														The	e syr	ntax supports a variet	y of functions a	nd math. Learn More
. ( 			•														{	{tok	en==false}}		Ø

If the token is false, you may continue as a voice only IVR flow, otherwise make an http request to see if the caller has connected to the URL sent in the SMS and started the visual session

16. Calling the IsWebClientStartedJson with the following parameters (the token was retrieved in the previous http request)

					•	•				-			/IsWebClientStartedJson	
													Method	
										1	1		Q GET	$\sim$
 $\rightarrow$		:/>	ls H	Clie	ents Red	Sta que	rte st	d	×	1			Query Parameters	
	N	o de	scri	ptio	n de	efin	ed				ľ		Key Value	
													Token {{token}}	Ô
											-			
													timeout 30	

Set the following parameters for the response

IsClientStarted HTTP Request Activity Sett	ngs	×
Response Timeout ①	31000	milliseconds
Number of retries ①	1	
Parse Settings		^
Content Type		
Q JSON		$\checkmark$
Output Variable		
Q started		~
Path Expression ①		
\$.started		

# Then set a condition for the started variable



If the value is False, you may continue as a voice only IVR or disconnect the call. In case the value is True, it means the visual interaction is on and the caller already sees the first visual screen.

#### Playing voice prompts when displaying screens (optional)

Using Webex and the CallVU platform, you can play voice prompts while displaying screens within the VIVR interaction. For example, while displaying a screen that collects your address details, you can play a message like "please fill in your updated address details". In order to do so, we are using the following 4 blocks for each such screen:

		•	•	•	•	•	•	•	•		•	•		•	•	•	•		•	• •	• •		•	• •	•		•
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												Error	Handl	ing			^				Undef	ned Err	or		-	-	
											l	Und	efine	dEri	ors												
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																				Error	Handling		^		•	•	
																				Lind	efined Fr	ror			•	•	
										•										Uniu	chileu El	101				•	

In this example we check if the landing screen is displayed and play a message we have recorded in advance for that screen.

1. Make a request to IsEndFlowJson with the following request parameters

IsLandingScree HTTP Request Activity	enDispl Settings	×
Connector 🛈		
Q CallVUConnectorv1		$\sim$
Request Path ①		
/IsEndflowJson		
Method		
Q GET		~
Query Parameters		
Key	Value	
Token	{{token}}	Ū
Screen	Login	Û

The Login, is the screen's name in the visual Micro App created in the CallVU Studio (first screen of the flow)

colivu How can we help you	Account Account Fundamentaria	Eliterate Col VU Edit Account Management	tipenderond ✓ cq VU Update Successful!	Leaster voi for the next.
today?	Last Name Smith		Your changes have been saved	
	Connect	Ersel		Talk to an agent
Open an account	Prone Number (201):000-12222	Address		
	Email john@company.com	Scient Address	Continue	Hang up Call
Account of Carls	Address	Cty		Call, Hongup
	Servert Address 123 Droadway St	SateZu		callvu
	City San Rondsoo			
	State CA			
	2.0 902222	Save Changes		
				Zr

Set the response parameters as follows

Parse Settings	^
Content Type	
Q JSON	$\sim$
Output Variable Q ScreenDisplayed Path Expression ()	$\checkmark$
\$.status	į

2. Set a condition to check if the screen is displayed to the caller

Solution Activity Settings	×
General Settings	^
Activity Label	
IsLandingOn	
Activity Description	
Check if the landing screen is displayed	
	/
Expression	^
Write an expression for the activity to evaluate	as True or False.
The syntax supports a variety of functions and i	math. Learn More
{{ScreenDisplayed=="true"}}	

3. If the screen is not displayed play a one second silence message and go back to step 1

	Q Search Flow	Ctrl K	PlaySilence ×
	False	• · · ·	Play Message Activity Settings
	Error Handling	~ *	
	Undefined Errors		Enable Text-to-Speech
			Add the ability to read dynamic messages. These messages can contain variables and be used in a sequence with audio files. If
			typing variables, use this syntax: {{ variable }}. You can also use
$\longrightarrow$	PlayLandingM Play Message		the <speak></speak> tags.
	No description defined		Add one or more audio files to play in a sequence. ①
	Error Handling		
	Undefined Error		1 Audio File
			Q SilenceOneSecond.wav ~
→ ©	PlaySilence Play Message		Add Audio File Add Audio Variable
No d	lescription defined		
Error	Handling ^		
Und	defined Error		Anthelia Onterest Manlah Ing
			Activity Output variables

4. If the screen is displayed, play the screen's voice message you have recorded and continue to the next screen

ent Flows @	Hel	р				(	Q	S	ear	ch	Flo	w	C	irl I	к	PlayLandingMsg
Error Handlin	9		~													Play Message Activity Settings
Undefined	Error	5		-												Enter a Description
					11											
					1											
	±⊗.															
PlayLandingM Play Message	-	1														Prompt
No description defined	1				1											
Press Manufactor a contractor	- 1															Enable Text-to-Speech
error Handling	-															
Undefined Error	1															Add the ability to read dynamic messages. These messages cal
																contain variables and be used in a sequence with audio files. If
																typing variables, use this syntax: {{ variable }}. You can also use
PlaySilence																SSML to construct the message. It using SSML, insert it inside
Play Message																the <speak></speak> tags.
lescription defined																Add one or more audio files to play in a seguence (i)
r Handling																Add one of more addio lifes to play in a sequence.
defined Error																1 Audio File
																C Greetings.wav

# Termination of the visual journey

The visual journey can be terminated within an IVR flow or at the end of it, upon hang-up based on the business decision of the client that builds the IVR flow. In order to terminate the visual journey, an http request to SetDynamicDisplayJson with the following parameters should be called

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_					Ø									
<>	>	End\	/isua Regi	ICall	Ť.									
End	a jo	oume	v											
					۰.									

Кеу	Value	
PhoneNumber	{{CallerANI}}	Ô
File	!EndCall	Ô
Token	{{token}}	Ô
UrlSlug	24671071-EE38-4F7C	Ō

The UrlSlug value is the one retrieved previously

# The response is defined as follows

Parse Settings	^
Content Type	
Q JSON	$\checkmark$
Output Variable	
Q token	~
Path Expression ①	
\$.token	
	li

Download Sample VIVR Flow.json to see the implementation above.