Voice Microservices Events and Models Reference

Working with queues

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Contents

Learn about call models for queues.

Related documentation:
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RSS:
- For private edition

For simplicity, the examples on this page use abbreviated attribute values. For example, ConnID **1**, which – in actual events – displays as ConnID>@metainformation>.

The following comments and abbreviations are used in the call models:

- OPT–Optional.
- DIAL–Might be a dialed number or is not present if Voice Microservices have no information about the other party.

Multiple-queue call treated at an IVR port with treatment at IVR queue

The following table describes a multiple-queue call treated at an IVR port with treatment at the IVR queue.

A	Q1	Q2	Q3	IVR	Agent
Inbound/ internal call to Q1	**Call to Q1**				
EventDialing ConnID **1** ThisDN **A** ThisDNRole **Origination** OtherDN* **Q1** OtherDNRole **Destination**					
	EventQueued ConnID **1** ThisDN **Q1**				

	ThisQueue **Q1** OtherDN **A**				
		Call placed in second queue			
		EventQueued ConnID **1** ThisDN **Q2** ThisQueue **Q2** OtherDN **A**			
			Call placed in IVR queue for treatment when no agents ready		
			EventQueued ConnID **1** ThisDN **Q2** ThisQueue **Q2** OtherDN A		
			EventDiverted ConnID **1** ThisDN **Q3** ThisQueue **Q3** OtherDN **A** ThirdPartyDN **IVR DN** CallState **ConverseOn**	EventRinging ConnID **1** ThisDN **IVR** ThisQueue **Q3** OtherDN **A** CallState **ConverseOn**	
				Answer	
				EventEstablished ConnID **1** ThisDN **IVR** ThisQueue **Q3** OtherDN **A**	
					Agent Ready
	EventDiverted ConnID **1** ThisDN **RQ2** ThisQueue **RQ2** OtherDN **A** ThirdPartyDN **AgentDN**	EventDiverted ConnID **1** ThisDN **Q2** ThisQueue **Q2** OtherDN **A** ThirdPartyDN **AgentDN**		EventReleased a ConnID **1** ThisDN **IVR** ThisQueue **Q3** OtherDN **A**	EventRinging ConnID **1** ThisDN **AgentDN** ThisQueue **Q1** OtherDN **A**
					Answer
EventEstablished b ConnID **1**					EventEstablished ConnID **1** ThisDN **AgentDN**

ThisDN **A** OtherDN **AgentDN** CallState **OK**					ThisQueue **Q1** OtherDN **A** CallState **OK**

a. EventReleased can occur before an agent becomes available because the IVR finishes call treatment.

b. In some deployments, EventEstablished for party A can occur at the same time as the IVR EventEstablished, especially if a call comes through the PSTN.

Abnormal call flow

Interruption Point	A	Q1	Q2	Q3	IVR	Agent
*	EventReleased OtherDN **Q1**	EventAbandoned ConnID **1** ThisDN **Q1** OtherDN **A**	EventAbandoned ConnID **1** ThisDN **Q2** OtherDN **A**	EventAbandoned ConnID **1** ThisDN **Q3** OtherDN **A**	EventReleased ConnID **1** ThisDN **IVR** OtherDN **A**	

Multiple-queue, call treated at an IVR port with direct treatment at IVR port

The following table describes a multiple-queue call treated at an IVR port with direct treatment at the IVR queue.

External party	Q1	Q2	IVR	Agent
Inbound/internal call to Q1	**Call to Q1**			
EventDialing ConnID **1** ThisDN **A** ThisDNRole **Origination** OtherDN* **Q1** OtherDNRole **Destination**				
	EventQueued ConnID **1** ThisDN **Q1** ThisQueue **Q1** OtherDN **A**			
		Call placed in second queue		
		EventQueued		

External party	Q1	Q2	IVR	Agent
		ConnID **1** ThisDN **Q2** ThisQueue **Q2** OtherDN **A**		
			Call placed directly to IVR port	
			EventRinging ConnID **1** ThisDN **IVR** OtherDN **A** CallState **ConverseOn**	
			Answer	
			EventEstablished ConnID **1** ThisDN **IVR** OtherDN **A**	
				Agent ready
	EventDiverted ConnID **1** ThisDN **RQ2** ThisQueue **RQ2** OtherDN **A** ThirdPartyDN **AgentDN**	EventDiverted ConnID **1** ThisDN **Q2** ThisQueue **Q2** OtherDN **A** ThirdPartyDN **AgentDN**	EventReleased [a] ConnID **1** ThisDN **IVR** OtherDN **A**	EventRinging ConnID **1** ThisDN **AgentDN** ThisQueue **Q1** OtherDN **A**
				Answer
EventEstablished [b] ConnID **1** ThisDN **A** OtherDN **AgentDN** CallState **OK**				EventEstablished ConnID **1** ThisDN **AgentDN** ThisQueue **Q1** OtherDN **A** CallState **OK**

a. EventReleased can occur before an agent becomes available because the IVR finishes call treatment.
b. In some deployments, EventEstablished for party A can occur at the same time as the IVR EventEstablished, especially if a call comes through the PSTN.

Abnormal call flow

Interruption Point	External party	Q1	Q2	IVR	Agent
*	EventReleased OtherDN **Q1**	EventAbandoned ConnID **1** ThisDN **Q1** OtherDN **A**	EventAbandoned ConnID **1** ThisDN **Q2** OtherDN **A**	EventReleased ConnID **1** ThisDN **IVR** OtherDN **A**	

Multiple-queue call with call removed from queue

The following table describes a multiple-queue call with the call removed from the queue.

A	Q1	Q2	IVR	Agent
Inbound call to Q1	**Call to Q1**			
	EventQueued ConnID **1** ThisDN **Q1** ThisQueue **Q1** OtherDN **A**			
		Call placed in second queue		
		EventQueued ConnID **1** ThisDN **Q2** ThisQueue **Q2** OtherDN **A**		
			Call placed in third queue for treatment when no agents ready	
			EventQueued ConnID **1** ThisDN **Q3** ThisQueue **Q3** OtherDN **A**	
			Call cleared from third queue	
			EventDiverted ConnID **1** ThisDN **Q3** ThisQueue **Q3** OtherDN **A** CallState **Cleared**	
				Agent ready
	EventDiverted ConnID **1** ThisDN **Q1** ThisQueue **Q1** OtherDN **A** ThirdPartyDN **AgentDN**	EventDiverted ConnID **1** ThisDN **Q2** ThisQueue **Q2** OtherDN **A** ThirdPartyDN **AgentDN**		EventRinging ConnID **1** ThisDN **AgentDN** ThisQueue **Q1** OtherDN **A** CallState **OK**
				Answer
				EventEstablished

				ConnID **1** ThisDN **AgentDN** ThisQueue **Q1** OtherDN **A** CallState **OK**