Genesys Engage On-Premises Use Cases

Genesys Personalized Routing (CE02) for Genesys Engage on premises

12/24/2025

Apply personalized routing to voice interactions

What's the challenge?

When your customers call, they expect you to know who they are. If they are connected to employees who don’t have any information about them or their previous interactions — resulting in unnecessary repetition, effort and time — your customer experience scores suffer.

What's the solution?

Create an effortless experience by recognizing a repeat customer and prioritizing a connection to the same agent who previously served them. Offer expected wait times and the convenience of self-service or a call back. Genesys Personalized Routing uses context-based routing to direct calls to the best resource.

Other offerings:

PureConnect

Contents

- 1 What's the challenge?
- 2 What's the solution?
- 3 Use Case Overview
  - 3.1 Story and Business Context
  - 3.2 Use Case Benefits*
  - 3.3 Summary
- 4 Use Case Definition
  - 4.1 Business Flow
  - 4.2 Business and Distribution Logic
  - 4.3 Distribution Flow
  - 4.4 Distribution Flow
  - 4.5 Distribution Flow
  - 4.6 Distribution Flow
- 5 User Interface & Reporting

    - 5.1 Agent UI
    - 5.2 Reporting
- 6 Customer-facing Considerations
    - 6.1 Interdependencies
- 7 Related Documentation
    - 7.1 Agent Workspace
    - 7.2 Workspace Desktop Edition
    - 7.3 Document Version

Use Case Overview

Story and Business Context

This functional use case has been created to enable companies to use Advanced Genesys Routing capabilities to improve customer experience by routing voice interactions to the best fit agent based on the type of request and customer context. The ability to recognize repeat customers is a very common scenario. Detailed routing behavior is driven by configuration parameters and rules, therefore providing a highly flexible framework to adapt to specific organization needs. The base logic is based on experience and best practices from previous implementations and therefore enables the organization to use best practice scenarios to enable fast realization of benefits.

Use Case Benefits*

The following benefits are based on benchmark information captured from Genesys customers and may vary based on industry, lines of business or Genesys product line:

Use Case Benefits	Explanation
Improved Customer Experience	Routing calls based on customer context reduces familiarisation time and improves customer experience.
Improved Employee Utilization	Using customer context enables routing to agents who can handle the customer's specific query more quickly.
Increased Revenue	Routing calls to the same agent that the customer previously spoken to may increase the chances of completing a sale.
Reduced Handle Time	Enabling agents to handle queries more quickly improves employee utilization.
Reduced Transfers	Routing calls to agents based on customer context reduces the need for internal transfers.

Summary

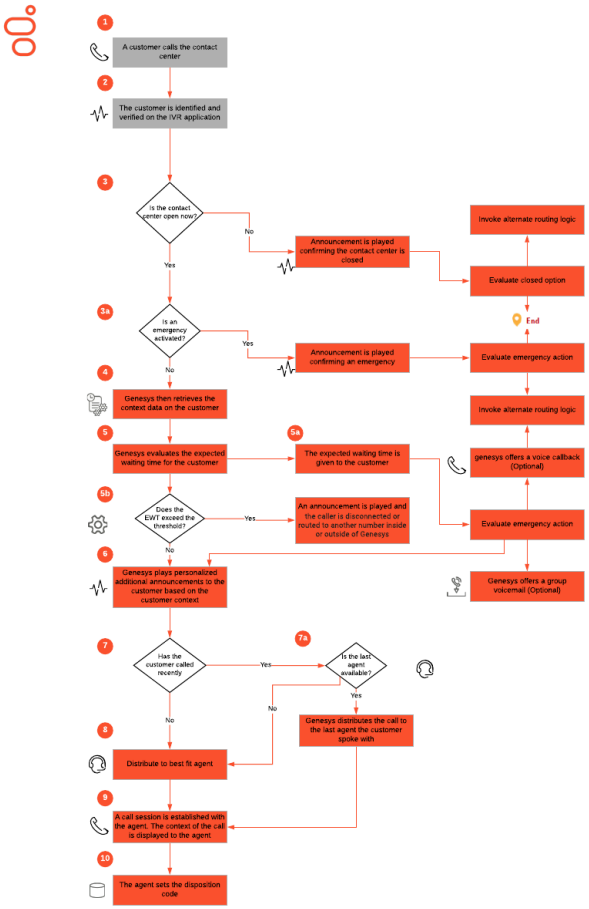
A customer call is qualified within the IVR. The customer is identified and authenticated (if needed) within the IVR menu (not part of this use case). The customer ID is used to retrieve context data on the customer from Genesys Context Services. Based on his choices within the IVR and on the context data, he is routed to the best agent able to serve his request and potentially additional services, e.g. to realize up-sell potential. All relevant context information is displayed to the agent to enable high-quality service delivery. Providing the ability to recognize customers in all touch points and channels, orchestrating the interactions; enabling the agent to see the context to better serve the customer and being able to match callers with the same agent with whom they previously spoke are ways to deliver an excellent customer experience.

The logic of this use case is business rules driven and therefore flexible to changing needs and business environments.

Use Case Definition

Business Flow

The following flow describes the use case from the perspective of the main actors, i.e. the customer and the contact center agent. It provides a high-level view of the basic flow. The detailed description of the underlying call flow is described in Chapter “Distribution Logic”.



Business Flow Description

1. The customer calls one of the numbers of the contact center.
2. He is routed to an IVR application which is determining the service type and also performs an Identification and (optionally) Verification of the customer. This functionality is provided outside of the scope of this use case, it is assumed that the information on the requested service and customer identification is passed on to be used within this use case. The use case CE7 - Effective Identification and Validation in IVR can be used for this functionality. Alternatively, customer CLI is used for Identification.
3. If the customer calls outside of out-of-office hours or if an emergency situation is in progress, an announcement is played. After this the caller may be reconnected or diverted to another number inside or outside of Genesys.
4. Genesys retrieves context data on the customer based on the customer identification.#If the contact center is open the routing parameters for this particular call is set based on the type of request and the customer context. This will enable flexible and personalized call handling.
5. The Expected Wait Time (EWT) for the customer is calculated and is announced to the customer (optional). If the EWT exceeds a specific threshold, an announcement is played and the caller is disconnected or routed to another number inside or outside of Genesys (optional).
6. Additional announcements are played to the

customer. These announcement are based on the customer context. Examples include: Quality announcements/Special promotions-offers for the customer/ Announcements for potential self-service options

7. If the customer has been calling recently for the same type of request, Genesys can route to the last agent (configurable based on type of request and customer context). In case this agent is not logged in or not available for this call within a specified time out, the call is routed to the requested skill
8. The call is distributed to the best agent who:
   - Has the base skill(s) to handle the original request
   - Has the supplementary skill(s) determined by the customer context (optional). Examples include:Skills to upsell a defined product / service to the customer or specific empathy skills based on the customer segment or demographic
   - A cascading mechanism enlarges the potential agent pool by suppressing the supplementary skill and / or reducing the skill level on the base skill if the call cannot be distributed within specific timeouts.
9. Once the call is distributed to an agent, the call context information is displayed to the agent. As an example, the agent is able to see any special offer or promotion for the customer, so he can start the relevant information. The agent handles the customer request and any potential up-/cross-sell opportunity.
10. After the conversation with the customer, the agent records the outcome of the call for reporting purposes e.g. if he has acted on the presented lead

Business and Distribution Logic

Business Logic

Emergency Check

Emergency mode activation is enabled at three levels: Global, Service (Type of Request) and Queue. The emergency mode is not only checked at the beginning of a call, but is constantly monitored during call queuing. If an emergency flag is set for a queued call, the corresponding emergency announcement is played, and the configured action applies to the call (disconnect or deflect to another number within or external to Genesys).

Furthermore, Genesys runs a parallel stream to continually check if agents are logged onto the platform. If no agents are detected, then an emergency mode is automatically activated.

EWT Announcements

Announcement of Expected Wait Time to customers is handled based on predefined recordings. It is a good practice to announce expected wait times approximately to not jeopardize customer expectation. Six thresholds are configured which can trigger different announcements. Default values are: 60, 120, 180, 300, 600 and 1200 seconds. The announcement text should match the threshold.

Last Agent Routing

The last agent(s) a customer spoke to is stored within Context Services (part of Universal Contact History) including the base skill which was required for the corresponding service. When a customer calls the contact center for the same service and Last Agent Routing is enabled, Genesys checks in Context Services for a recent contact, not older than a configurable threshold, handled by an agent with the required skill. The corresponding agent is used for Last Agent Routing.

In case of multiple matches, the most recent entry is used.

Busy Treatment

Messages and Music are played for queuing calls. It is possible to configure up to six messages with music treatment in between. The first two messages and associated music treatments are played once, the remaining 4 messages and music treatments are looped until the call is answered or abandoned.

Skill Model

Skill types

The skill model, used for distribution, is based on three logically different skill types which define attributes and knowledge of the agents:

Basic skill

This skill is required to handle a specific type of request or service. One basic skill is required for each call for the distribution of calls to agents.

Language skill

This skill type determines the language in which a call shall be answered. The requested language is provided via the IVR. If no language is provided, a default language is used. One language skill is required for the distribution of calls to agents.

Supplementary skill

Genesys Routing utilizes supplementary skills for enhanced routing logic and personalization. Supplementary skills are defined by customer specific context data.

The following provides an example:

- A customer calls the service hotline for "Account Transactions."
- He successfully identifies and authenticates within the IVR. The corresponding data are passed to Genesys.
- The caller's profile within Context Services indicates that the caller is eligible for a Platinum Credit Card up-sell.
- In this case, the call should ideally be routed to an agent with the base skill "Account_Handling" and the supplementary skill "Up-Sell" to ensure that he can handle both the original request and successfully convert the up-sell opportunity for this customer.

Skill level

Each agent has one or more skills associated to their profile and a skill level associated to each base skill, referred to in this document as proficiencies. The skill level is used to define primary, secondary and tertiary targets within the routing logic described in section "Targeting". The targets are

defined as follows:

- Primary target = Agents with base skill level > N & language skill > 0
- Secondary target = Agents with base skill level > M & language skill > 0
- Tertiary target = Agents with base skill level > P & language skill > 0

N, M, and P are configurable based on request type and customer context.

Priority Model

Different priorities are set for calls according to business value of the type of request. If priorities are set and an agent becomes available, Genesys distributes the call with the highest priority matching the agent's skills. This is specifically relevant if the agent can receive interactions for different types of request. The priority of a call is increased over time to make sure that low-priority calls are still distributed to an agent after a potential longer waiting time (priority tuning). Priority tuning is configured via the following parameters:

- Priority start (the starting priority)
- Priority increment (the amount to increase the priority after the interval time)
- Priority interval (the time between priority increases)
- Priority limit (the maximum priority)

These values are configurable by type of request and by customer context.

In addition, a priority mark-up is configured for customers who have previously completed IDV or ID within the IVR to account for their additional time within the IVR compared to customers who did directly drop out into the queue. The priority mark-up for customers who attempted / complete IDV and ID is relative to the amount of time it takes to complete the IDV and ID verification application within the IVR.

Transferred calls and RONA calls can also get a higher priority assigned.

Transfer

The agents can transfer calls to defined internal agent groups or business lines (route points). The routing logic defined for these route points is similar to the routing logic defined above (without initial announcements). Only transfer route points are visible to the agent in WDE.

Additional functionality

- RONA-functionality: If an agent does not accept the call, the call is automatically put back into the distribution flow after a time out. The agent is set to not-ready.
- This use case can be combined with other non-voice use cases. Blending is possible. The configuration of priority values need to be synchronized with priority settings for other media types to allow an ordering of interaction within the universal queue corresponding to business requirements. Capacity rules will be configured for the agents / agent groups to define what interactions is handled in parallel (if any).

Context Service Data

Customer Context is stored within Genesys Context Service as part of the Universal Customer History Server. The data is provided by the organization. A regular update process has to be set up. Instructions to map the organization's specific data with the data stored in Genesys need to be determined. The following data scheme provides flexibility to map specific organizational data with data to be used within Genesys. The data is used for routing rules or for display of the agent workspace. Context data related to a list is only used if the time and date of the call is within the List Stop and List Start data. The following table shows the available data and how these are used:

Attribute	Definition	Agent Workspace	Routing Rules
Customer ID	Unique identifier of the customer	X	
Name	Customer Name	X	
Segment	Customer Segment	X	X
Customer Data 1	Additional information on the customer to be used in rules		X
Customer Data 2	Additional information on the customer to be used in rules		X
Customer Data 3	Additional information on the customer to be used in rules		X
Customer Data 4	Additional information on the customer to be used in rules		X
Customer Data 5	Additional information on the customer to be used in rules		X
Display Data 1	Custom Attribute to be displayed at agent workspace	X	
Display Data 2	Custom Attribute to be displayed at agent workspace	X	
List Name	This data is used to indicate that the customer is on a specific list / campaign	X	X
List Type	Type of the list or campaign	X	X
List Start	When actions for a list / campaign starts		X
List Stop	When actions for a list / campaign stops		X
List pop message	Message to be displayed to agent	X	
List actioned	Indicates if the list / campaign has been already actioned. If the		X

	list / campaign has been actions, no list data is displayed to an agent.		

Parameters available per type of request / service

The following lists the business parameters which are configurable by service. These are configured by Genesys Administrator Extension. Please note that the list is not exhaustive as additional parameters for technical settings might be required. It also does not reflect the technical realization and naming conventions to be used. Also some of the parameters are combined for ease of readability. The list is intended for business readers to give an overview of the flexibility in the configuration of the routing logic:

Name	Description
Service Name	Name of the service.
Enable Rules	Flag to indicate if rules are used for the service. If rules are not enabled for the service, the default parameter settings within GAX are used.
Service Emergency Flag	Flag to set emergency status for the service.
Open hours	Sets the opening hours of the service.
Special Day	A list of exceptions to the regular open hours, for a holiday or other reason.
After Hour Message	Message to be played if the call is out of business hours.
Special Day Message	Message to be played if the call is on a special day.
Emergency Message	Message to be played in emergency situations.
EWT flag	Flag to determine if EWT shall be announced to a customer.
EWT Thresholds	6 Thresholds to activate different EWT announcements (see chapter "EWT Announcements").
EWT Announcements	6 pre-recorded EWT announcements corresponding to the 6 thresholds above.
EWT Breach Threshold	Threshold to determine if a call is queued (see chapter "Expected Wait Time Checkâ€).
IDV Type	Level of ID&V required for the type of request. Values are "None", "ID" or "ID&V". This value is displayed to the agent.
Quality Message	The quality message to be announced to the customer (see chapter "Main Flow").

Parameters available per customer context and type of request / service

The following lists the business parameters which are configurable by service and customer context. Default values for these parameters are configured by Genesys Administrator Extension per service.

These base parameters are overwritten by parameters defined by rules using additionally the customer context. These rules are configured in Genesys Rules Engine. Please note that the list is not exhaustive as additional parameters for technical settings might be required. It also does not reflect the technical realization and naming conventions to be used. The list is intended to give business users an overview of the flexibility in the configuration of the routing logic:

Name	Description
Special Message 1&2	The special messages to be played after the quality message (See chapter “Main Flow”).
Last Agent Routing enabled?	Flag to indicate if Last Agent Routing is enabled for the Service
Last Agent Routing Time Out	Time out used to wait for the last agent.
Basic skill	Basic skill required for this call
Supplementary skill	Supplementary skill for this call.
Supplementary skill timeout	Timeout to wait for an agent with the supplementary skill.
Skill Level Targets 1-3	Skill level thresholds to define the primary, secondary and tertiary target. The skill level defined provides the minimum skill level for the corresponding target.
Timeout 1,2	Timeouts to wait for the primary and secondary target.
In Queue Messages and Music	Parameters to define the in busy treatments as described in chapter Busy Treatment.

Reporting Parameters

The following five business parameters represent reporting categories and are completely customizable to your business model. You can assign different combinations of these parameters to each of your Inbound and Distribution parameter groups, to distinguish them in reporting and enable you to identify the unique properties of the parameter group.

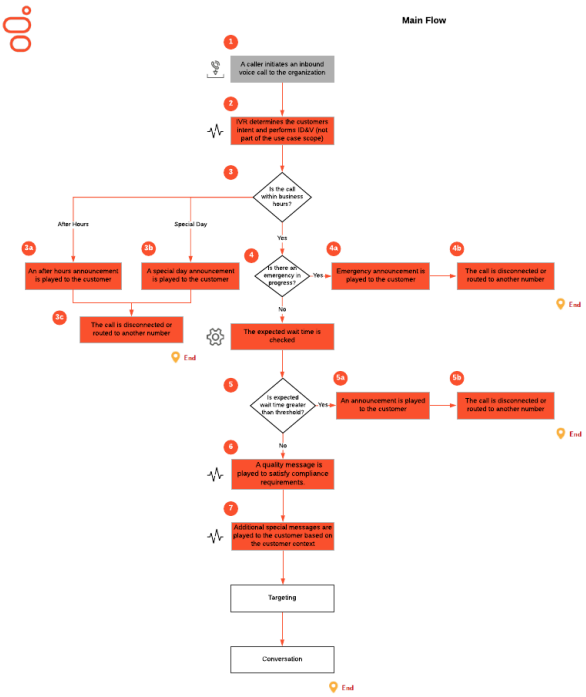
Name	Description
Department	Business organization used as a category for reporting
Flow	A business flow used as a category in reporting
Product	A product or product group used in reporting
Service	Business categories typically used as the top level of the call steering menu choices

Distribution Flow

(1) Main Distribution Flow

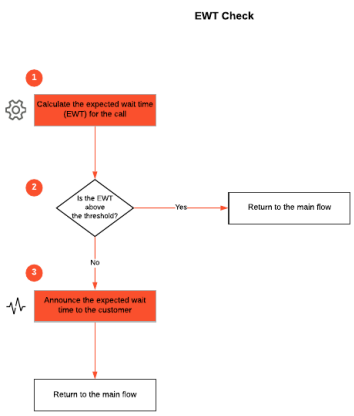
Distribution Flow

(2) Expected Wait Time Check



Distribution Flow Description

Nr.	Description
1	The customer calls one of the numbers of the contact center.
2	The IVR determines the type of request (or service) and the customer ID (out of scope for this use case).
3	Genesys performs a check if the customer calls within the business hours for his requested service. The call may be: Within business hours/ After hours/ On special days (e.g. public holidays). In the last two cases, a corresponding announcement is played. The caller is either disconnected or deflected to a different number inside or outside of Genesys for further processing.
4	Genesys performs a check if an Emergency Condition is activated for the call. In this case, a corresponding announcement is played and the call is either disconnected or deflected to a different number inside or outside of Genesys for further processing.
5	The expected wait time is calculated. If the expected wait time is beyond a configured threshold, a corresponding announcement is



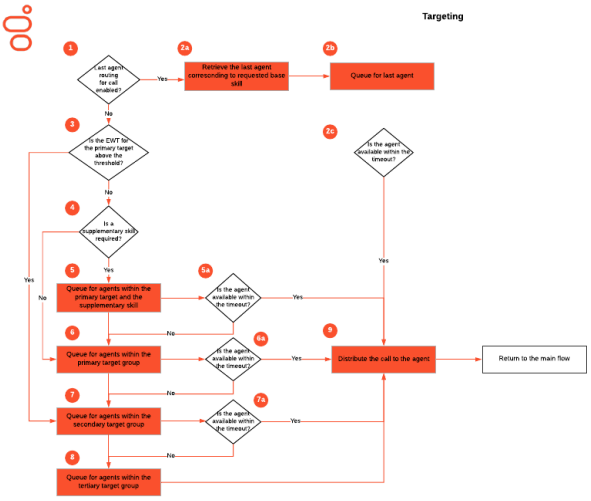
Nr.	Description
	played and the call is either disconnected or deflected to a different number inside or outside of Genesys for further processing.
6	A quality message is played to satisfy compliance requirements.
7	Up to two special messages are played which depend on the type of request and the customer context.

Distribution Flow Description

Nr.	Description
1	Genesys calculates the Expected Waiting Time for the call.
2	If the EWT is beyond a configurable threshold, the flow returns to the main flow to determine further processing.
3	The Expected Wait Time is announced to the customer based on predefined intervals and pre-recorded announcements.

Distribution Flow

(3) Targeting

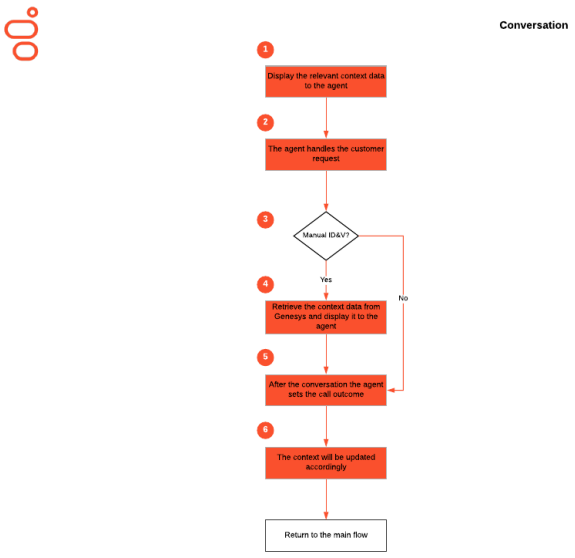


Distribution Flow Description

Nr.	Description
1	Genesys determines if Last Agent Routing is activated for the call (configurable by type of request and context data, such as customer segment).
2	If Last Agent Routing is activated, Genesys verifies if the customer has spoken to an agent for the current type of request within a configurable time period. In case of a matching entry, Genesys attempts to distribute to this agent. After a configurable timeout the call continues with the distribution to the skill.
3	Genesys calculates the Expected Wait Time (EWT) for the call based on a distribution to the primary target group of all agents being able to handle the service (without any supplementary skill). If the EWT is above a configurable threshold, the routing logic immediately continues with the secondary target group.
4	Genesys checks if a supplementary skill is required based on the customer context data.
5	In this case, Genesys queues the call for all agents within the primary target group

Distribution Flow

(4) Conversation



Nr.	Description
	who also have the supplementary skill. If an agents becomes available before the configurable timeout is reached, the call is distributed to this agent. Otherwise, the target is expanded to the full primary target group.
6	Genesys targets all agents within the primary target group. If an agents becomes available before the configurable timeout is reached, the call is distributed to this agent. Otherwise, the target is expanded to the secondary target group.
7	Genesys targets all agents within the secondary target group. If an agents becomes available before the configurable timeout is reached, the call is distributed to this agent. Otherwise, the target is expanded to the tertiary target group.
8	Genesys targets all agents within the tertiary target group until an agent becomes available.
9	When an agent becomes available, Genesys distributes the call to this agent.

Distribution Flow Description

Nr.	Description	
1	When the call is distributed	

Nr.	Description	
	to the agent, all relevant information on the call and the customer context is displayed at the agent workspace.	
2	The agent handles the customer request.	.
3	The customer may not have identified and verified upfront, but his request may require identification and potentially verification. In this case, the agent can handle this manually via a third party system (outside of the scope of this use case).	
4	Once the customer is identified (and verified), the agent can update the customer Id and Verification status in Genesys. The customer context is retrieved from Genesys and displayed to	

Nr.	Description	
	the agent.	
5	After the conversation, the agent can set the call outcome including the information whether he acted on a specific lead (if part of the customer's context data). This information is used for reporting purposes.	
6	Additionally, the information is updated in Context Services to avoid that the customer is presented with the same lead when he calls again.	

Distribution Logic

Call Qualification & Customer Identification (outside of scope of this use case)

As a prerequisite for this use case call qualification and customer identification is handled by an IVR application upfront of the start of this use cases. This IVR application is outside the scope of this use case.Use case CE7 - Effective Identification & Validation in IVR can be used for this functionality.

The assumption is that Genesys receives the following information from the IVR:

- Type of Request / Service (either via DTMF, natural language recognition or IVR intelligence).
- Caller language
- Caller identification
  - Information on the status of the identification:
    - Anonymous

    - Identification provided
    - Identification and Verification (ID&V) provided
- Customer ID
    - the customer ID might be any ID as used by the organization which identifies the customer
    - Alternatively the CLI is used for customer identification, however this is less reliable

This input is used to determine the parameters for the specific customer call.

Remark on naming convention in this document:

"Type of request/service" is the mapping of a customer call to his need by using an IVR prequalification like DTMF menu. Therefore it may be more granular than a published service number for the contact center, or a department within the contact center (e.g. Sales, Billing). The latter is sometimes also referred as service within some organizations. However, in this document, "service" is used interchangeably with "type of request" and referring to the more granular definition.

User Interface & Reporting

Agent UI

Context Data

When a call is distributed to an agent the following data is displayed:

- Context Services Data as defined in chapter “Context Service Data”
- Customer language
- Time in IVR and in Queue
- ID & V Status
- ID or ID & V required for service?
- Indicator if a special promotional message has been played

Call Outcome / Disposition Code

If a lead is presented to an agent, the outcome can be classified within Agent Workspace. The outcome includes information about whether the lead has been actioned. Lead actioned data is stored in Context Services to prevent the interaction from being directed to an agent again.

Additionally, the call outcome is used for reporting.

Many different call outcomes / disposition codes can be configured.

ID&V

Agents can handle manual Identification and (optionally) Verification if required for the specific

customer request. ID&V is handled in an application outside of Genesys. However, it is possible for the agent to update the ID&V status of the call. In this case, the call data is updated and if the customer has not been identified before, the customer-related data from context services is retrieved and displayed to the agent. See also section “Conversation”.

General Requirements

- Agents can transfer calls to other individual agents.
- Configuration of not-ready reason codes (for example: Admin Work, Lunch, Meeting, Pause, RONA).

Reporting

Real-time Reporting

Genesys Pulse is a Genesys Administrator Extension (GAX) plug-in application that offers personalized dashboards based on specific functional, geographical or organizational needs. Pulse dashboards present information using graphical “widgets” that can be viewed as graphs or tables, showing information about specific key performance indicators, such as service level, interactions handled, and the average handle time. With Pulse you can:

- Monitor the current state and activity of Contact Center objects to help make decisions about staffing, scheduling and call routing strategies.
- Create widgets from predefined and user-defined templates for a fast and easy text or graphical presentation of selected or user-defined object statistics.
- Predefined Inbound templates
  - Agent KPIs
  - Agent Group Status
  - Agent Login
  - Queue KPIs

Historical Reporting

Genesys CX Insights (GCXI) provides customizable reports and dashboards that can help you track the benefits of this use case by analyzing historical data KPIs that you can use assess the routing and handling of interactions.

Some of the most relevant reports that are useful to measure the effectiveness of the engagement rules and efficiency of the use case include:

- Customer Perspective Report — Summarizes contact center milestones from a customer perspective, providing the average response times, revenue and customers satisfaction scores, and various service level percentages of interactions that enter or begin with the contact center. This report also provides such summary values as the average revenues generated by each customer segment, by media type, and to evaluate the average customer satisfaction scores. Attributes applied to these metrics include customer segment, service type, and media type.
- Interaction Volume Customer Segment Report — Provides detailed information about how interactions that enter the contact center are categorized into the business-result attributes that are configured in your environment, including analysis (based on the Entered with Objective metric) of the service level

within the perspective of the total number of interactions that are offered to resources by day over the reporting interval.

- Business Metrics Executive Report — Highlights exceptions to service level by business result, customer segment, and service type for those interactions that have defined a baseline service objective that is greater than zero (0). The Entered with Objective metric enables you to gauge service level within the perspective of the total number of interactions that were offered to resources, by day, over the reporting interval.
- Interaction Handling Attempt Report — Summarizes segment-related details with regard to an agent's handling of contact center interactions that are stored in the Info Mart INTERACTION_RESOURCE_FACT table, providing both the time that was required to distribute the interaction to the agent and data about the agent's contiguous participation in the interaction.
- Other reports relevant to this use case are found in the Agents, Business Results, Detail, and Queues folders.

For more information about Genesys CX Insights, see the *Genesys CX Insights 9.0 User's Guide*.

Customer-facing Considerations

Interdependencies

All required, alternate, and optional use cases are listed here, as well as any exceptions.

All of the following required:	At least one of the following required:	Optional	Exceptions
None	None	**Self-Service and Automation** • Genesys Customer Authentication (CE07)	None

General Assumptions

- Implementation based on SIP Server (SIP Voice Blueprint).
- Routing parameters are configured through GAX operational parameter groups or Genesys Rules Engine, which are referenced in the underlying strategy / routing application.
- Genesys Infomart and Interactive Insights is used for historical reporting.
- WDE is used as agent workspace.
- Pulse is used for real-time reporting.

Customer Responsibilities

- The IVR application to determine the type of request and customer ID is not part of this use case and has to be provided separately.
  - Alternatively, SIP Qualification and Parking with a script controlled by routing are used if full GVP application is not required. This functionality is also not included within the use case.
- All announcements are to be provided by the customer
- A process to upload and update customer data within Genesys Context Services needs to be set up.

Related Documentation

Agent Workspace

Agent Workspace enables agents to handle routed interactions, transfer interactions, and set interaction disposition.

- Agent Workspace 9 Help
- How Agent Workspace Works

Workspace Desktop Edition

Workspace enables agents to handle routed interactions, transfer interactions, and set interaction disposition.

- Workspace Desktop Edition Help
- Disposition Codes

Document Version

- Version **version 1.1.4** last updated **December 24, 2025**