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Business Edition Premise Provider's Guide

Voice routing application

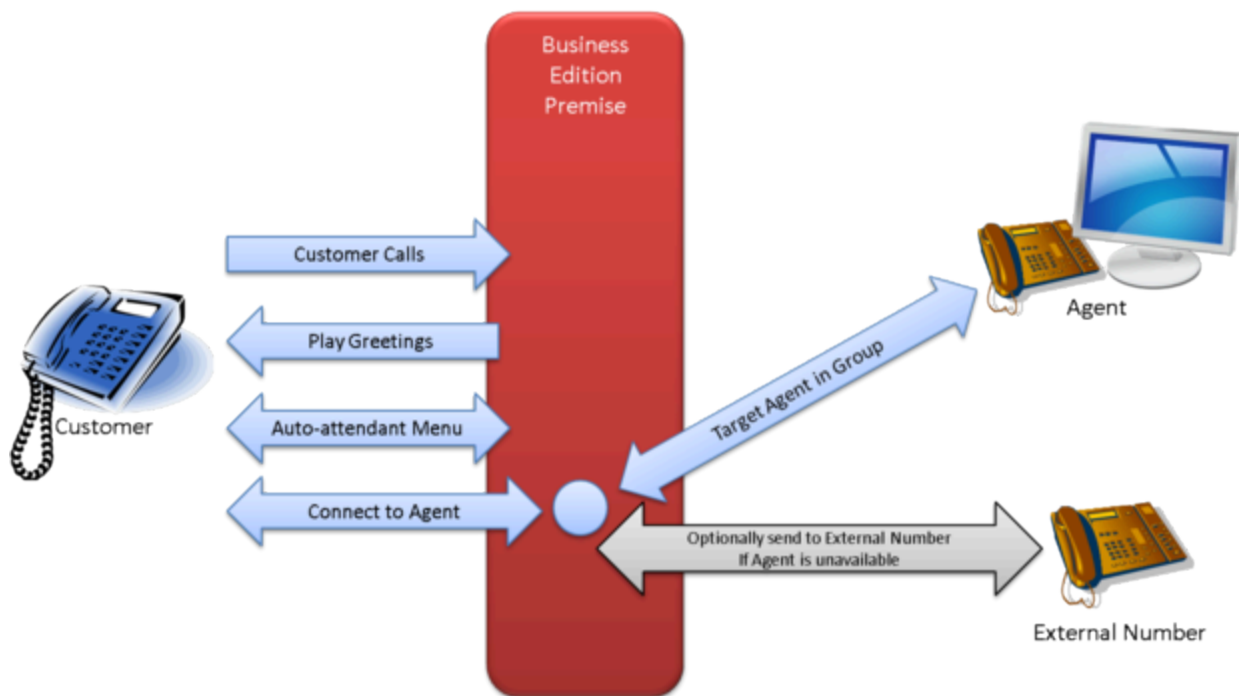
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Voice routing application

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Overview



Inbound routing

The voice routing application is deployed automatically during BEP installation and provides essential inbound call center functions using built-in strategies:

- **Entry handling** based on contact center status
- **Auto-attendant** (Interactive Voice Response) menus
- **Call distribution** based on agent availability and call priority

Entry handling

The application receives the incoming call, retrieves the dialed number (DNIS), and applies status conditions to the call. Is the contact center closed, and if so, why?

- Is it a holiday? If so, the caller hears the Special Day announcement.
- Did the call come in outside of normal operating hours? If so, the caller hears the Closed announcement.
- Is an emergency underway? If so, the caller hears the Emergency announcement.

If the contact center is open, the caller hears an announcement or the auto-attendant menu (if one exists), or the call passes directly to an agent.

Auto-attendant menus

If you have given the caller a menu of options (“Press 1 for Sales,” and so on), the call passes to the Auto-attendant menu (DTMF) workflow, which specifies the action to be taken depending on the caller’s menu choice. The Auto-attendant flow can cycle up to three times, to accommodate three layers of routing. The Auto-Attendant Menus (DTMF) workflow, diagrammed below, acts as an Interactive Voice Response tree to the customer. It plays a menu announcement configured in the Inbound Template, and assigns a Distribution Parameter Group or an Inbound Parameter Group based on the digit (touch tones) collected. For example: The announcement gives the customer three choices (Press 1 for Customer Service, 2 for Sales, and 3 for Technical Support):

- Touch tone 1 = Customer Service (Distribution Template)
- Touch tone 2 = Sales (Distribution Template)
- Touch tone 3 = Tech Support at Route Point 6001 (the Inbound Template that matches the DNIS for the Technical Support Route Point)

The auto-attendant flow can accommodate up to three cycles during a call. In the example above, Touch tone 2 (Sales) might give the caller a second set of options: for Product A, press 1; for product B, press 2, and so on. To learn how to build your menus, see the **Configuration** tab.

Call distribution

The Distribution call flow distributes the call to an agent:

1. It collects statistics to determine what agents are logged in and available to take the call.
2. It routes the call to an agent from a target agent group: it first tries an agent from Target 1, then, in sequence, tries Targets 2, 3, and 4 if it does not find an agent within the timeout set for that target. Finally, if it does not find an agent from Targets 1-4 within the allotted time, it sends the call to the overflow target, which can be a standard telephone number (such as 415-555-1212) or a routing point (such as 6001). Note that Targets 2-4 are optional; routing skips any undefined targets.

The application plays queue music in a loop until the call is distributed to an agent or abandoned.

Redirect On No Answer (RONA): if the call has already been distributed to an agent who does not answer, the Distribution flow distributes the call as if it had not been previously distributed, and sets to *Not Ready* the status of the agent who did not answer.

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Configuration

Business Edition Premise routing configuration occurs at two levels:

- **Initial configuration**, which involves the automated setup of auto-attendant menus, business rules, and other configuration objects. The voice routing solution is automatically deployed and installed as part of the BEP software installation, with default initial configuration settings. These settings are usually sufficient for most site requirements and do not need to be changed.
- **Administrative configuration**, such as setting open hours and switching among auto-attendant menu

trees, is a subset of the initial configuration tasks and takes place entirely within Genesys Administrator Extension (GAX). It requires no advanced knowledge of Genesys software.

Important

To use Internet Explorer 10 to access Genesys Administrator Extension or Genesys Administrator, you must add your VM domain to the IE Trusted Sites.

You can configure different values for a number of routing parameters, such as open hours and call priority. To handle different call flow and email scenarios, you use GAX to create parameter groups based on the default parameter group templates supplied in Business Edition Premise.

Voice solution definitions (SPDs)

When solution definitions (SPDs) are installed, they automatically create several objects. If you install a new SPD, Configuration Server objects created by previous voice or email installations are not overwritten. **[+] Show more info**

The Voice SPD creates these objects:

- Default personality
- Audio resources
- Parameters
- Parameter group templates
- Parameter groups

The Voice SPD also creates these samples (object name in parentheses):

- ACD Queues (9000)
- Action codes (*Admin Work, Locked, Lunch, Meeting, Pause, RONA, Training*)
- Agent groups (*AG_Voice_Sample, AG_Voice_Skill_Sample*)
- Agent Logins (1000)
- Business attributes
- DN Groups (*All_ACDQueues, All_RoutePoints, All_VirtualQueues*)
- Extensions (8000)
- Place Groups (*All_Places*)
- Places (*Place_SIP_8000*)
- Route Point (selected during SPD installation)
- Skill (*Skill_Sample*)
- Virtual queue (*VQ_Default_sample*)

Initial configuration

Initial configuration of the voice routing application is done automatically during the BEP software installation. Typically, the defaults supplied in the solution definition are sufficient for most customer requirements. Changing these settings requires some knowledge of Genesys software.

You can adjust voice routing parameters in either of two ways:

- To set new default values to be used in all new parameter groups that use the parameter, open Genesys Administrator Extension, navigate to **Routing Parameters > Parameters**, and adjust values as desired. Do not change Key Names.
- To set a new value that applies only to a specific parameter group, open Genesys Administrator Extension, navigate to **Routing Parameters > Parameter groups**, and adjust values as desired.

Administrative configuration

You can use the following procedures to change the administrative configuration settings of your voice routing solution:

[+] Define the auto-attendant menus

You can use parameter groups to build multiple sets of up to three cascading auto-attendant menus. Keep in mind that you must record corresponding *Auto attendant menu announcements* for each set you build.

To create a single set of three cascading menus:

1. Plan your menu set, because it is most efficient to begin by creating the third tier and its touch-tone selections, then the second tier, then the first. Your plan will look something like the following (the parameter group type is in parentheses):

```
8000 (Inbound)
  1: Customer Service (Distribution)
    1: Wondrous Product Line (Distribution)
    2: Stupendous Product Line (Distribution)
  2: Sales (Distribution)
    1: North America (Distribution)
    2: EMEA (Distribution)
  3: Technical Support at routing point 6001 (Inbound)
    1: Printers (Distribution)
    2: Monitors (Distribution)
    3: Mice (Distribution)
```

A customer having difficulty with their mouse calls the number that corresponds to routing point 8000, then presses 3 for Technical Support and 3 again for Mice. In this example, you create 11 parameter groups: 2 Inbound and 9 Distribution.

2. Deploy the third-tier parameter groups (in the example, Wondrous Product Line, Mice, and the other 5). See below for help in setting the individual parameters.

3. Deploy the second-tier parameter groups. Add the third-tier groups as values for the Touch tone parameters. In the example, you deploy the Sales parameter group, then assign the North America group to Touch tone 1, and EMEA to Touch tone 2.

Important

When you create an Inbound parameter group, the name of the parameter group must be the same as the routing point that you want to handle these incoming calls (in the example, the Technical Support group must be named 6001).

4. Deploy a parameter group based on the Inbound parameter group template. Add the second-tier groups as values for the Touch tone parameters. In the example, you deploy the 8000 parameter group, then assign the Customer Service group to Touch tone 1, Sales to Touch tone 2, and 6001 to Touch tone 3.

[+] Upload audio resources

In GAX, for each audio resource, upload the corresponding audio (WAV) files:

Resource name	Description
Announcement-Auto attendant menu	Played when the auto attendant is enabled
Announcement-Closed	Played when the service is closed
Announcement-Emergency	Played when <i>Emergency declared</i> is activated
Announcement-Greeting 1	Played when Greeting 1 is enabled
Announcement-Greeting 2	Played after Greeting 1 when Greeting 2 is enabled
Announcement-Special day	Played for a <i>Special day</i>
Music File	Music played while the caller is in the queue

[+] Customize business attributes

Your customer might require different Disposition Codes, which are the codes agents can select to specify the outcome of an interaction. The default disposition codes are:

- Cross Sell
- Not Right Skill
- Terminated
- Transferred
- Up Sell

To modify these samples or create your own codes, in GAX, navigate to **Configuration > Routing / eServices > Business Attributes**, and open the existing Disposition Code Business Attribute.

Your customer might also require different reporting categories. The five default business parameters (Service, Segment, Product, Department, and Flow) 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.

[+] Set open hours and special days

The parameter **Open hours** sets the standard hours that your office is open during the week. Use the **Special day** parameter to set:

- The dates or days of the week on which your office is closed for the entire day.
- The dates or days of the week on which your office is closed for only part of the day. In these cases, you use the **Time Ranges** field in GAX to set the hours that you will be open on that date.

Specific dates set in **Open hours** are treated as special days. Hours set for the same date in **Special day** override those set in **Open hours**; for example, if **Open hours** specifies that you are open from 9AM to noon on December 31, and **Special day** sets the hours of 11AM-2PM for the same date, callers who call at 10AM on that date hear the Closed announcement. Similarly, in both parameters, date patterns higher in the list take precedence over those lower in the list.

[+] Set targets and target timeouts

Assign at least one target agent group for each parameter group. Change the timeout for each group as needed (default is 300 seconds, or 5 minutes). You should also assign a **Target overflow**, which serves as the "last resort" number to which a call is transferred when none of the other target agent groups answers within their timeout.

[+] Tune priorities

You can adjust the priority of calls using the four priority tuning options. Over time, unanswered calls receive higher and higher priority, ensuring that calls do not remain in the queue for excessive lengths of time.

- **Priority start** sets the initial call priority; you typically have little reason to change the default of 1.
- **Priority interval** sets the number of seconds between priority increments. If you set the priority interval to 60 seconds, for example, and the priority increment is 1, then after 5 minutes of wait time, the call would have a priority level of 6, pushing it ahead of calls with priority values of 1-5.
- **Priority Increment** sets the number to add to the priority value each time the priority interval is exceeded. As the priority levels are relative, a setting of 1 typically works.
- **Priority limit** sets the upper limit for priority increments; all calls at the maximum priority level receive equal treatment.

[+] Configure UCS database pruning (recommended)

Genesys recommends that you configure automatic pruning of the Universal Contact Server (UCS) database to prevent it from growing too large in size.

Important

Changes made to the UCS database maintenance settings will apply to all deployed media strategies (Voice, Email, Chat, and Outbound).

1. On the VM host, log in to Universal Contact Server Manager.
2. Select the **Scheduled task on Main DB** tab.
3. Configure the **Main DB** maintenance settings as desired.
4. Click **Save**.

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Verification of voice call routing and reporting

You can use the following procedures to verify that your BEP system is correctly receiving and routing calls and that the call reporting functionality is working.

[+] Verify call routing

To verify that Business Edition Premise is correctly receiving and routing calls, make a test call to an agent:

1. Ensure that you have:
 - A soft phone, such as [SJPhone](#)
 - A sound-enabled Windows PC that can connect to the Core server
2. In GAX, go to **Configuration > Environment > Applications > SIPS > Application Options** and set the SIPS TServer option **enable-unknown-gateway** to true.
Important: After completing the verification process, restore this value to false.
3. In GAX, go to **Configuration > Accounts > Agent Groups > Genesys One Voice > AG_Voice_Sample Properties**, and ensure that the user TestAgent belongs to the agent group AG_Voice_Sample.
4. In GAX, go to **Routing Parameters > Parameter Groups**, and for parameter group **6000** ensure that:
 - **Greetings activated** is True.
 - **Target 1** is AG_Voice_Sample.
 - **Open Hours** includes the current time (or the call will not route to the agent).
5. Install the Interaction Workspace (IWS) client by navigating to `http://VM name or IP address/InteractionWorkspace/publish.htm` and selecting **Install** or **Launch**.
6. Open IWS and log in using these credentials:
 - User name: TestAgent

- Password: (none)
- Place: Place_1000
- Queue: 1004@SIP_Switch

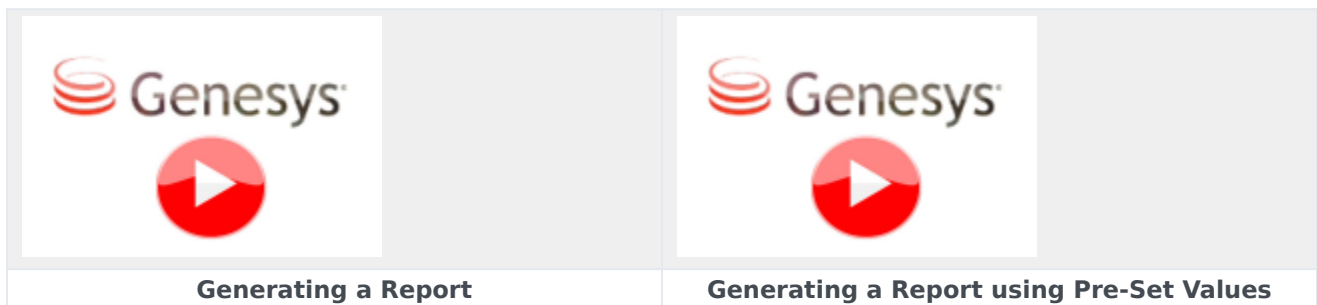
Ensure that the agent can log in and set their status to ready.

7. Open a soft phone as any user. For **Domain**, enter the FQDN of the SIP Server. Uncheck **Register with domain**.
8. Dial 6000. If the installation was successful, the call appears in IWS.

[+] Verify call reporting

To verify reporting, run a report in Interactive Insights (GI2).

VIDEO: To watch a short demonstration of running a report, click the Genesys icon below:



1. In a browser, log into GI2 at `http://VM name or IP address:9080/CmcApp/login.faces`.
 - User: administrator
 - Password: G3n35y5
2. Go to **Folders > Interactive Insights > 8.1.1 > Agents**.
3. Run the report **Agent Group Interaction Handling Report**.
4. In the report list, click **Refresh** until status = success.
5. Open the report and click **Instance Time**. If the installation was successful, the call appears in the report.
6. In GAX, go to **Configuration > Environment > Applications > SIPS > Application Options** and set the SIPS TServer option **enable-unknown-gateway** to false.

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Operational Parameters

For each parameter group, enter a description in the Description field. For instructions on setting

these parameters, see [Configuration](#).

Audio and Announcements

[+] Show parameters.

Parameter	Values (default in bold)	Mandatory?	Description
Announcement-Closed	Closed Annc , any valid audio resource	Yes	Audio Resource played when the service is closed
Announcement-Auto attendant menu	Auto-attendant Menu 1 , any valid audio resource	Yes	Audio Resource played when the auto attendant is enabled
Announcement-Emergency	Emergency Annc , any valid audio resource	Yes	Audio Resource played when <i>Emergency declared</i> is True
Announcement-Greeting 1	Greeting 1 , any valid audio resource	Yes	Audio Resource played when Greeting 1 is enabled
Announcement-Greeting 2	Greeting 2 , any valid audio resource	No	Audio Resource played after Greeting 1 when Greeting 2 is enabled
Announcement-Special day	Special Day Annc , any valid audio resource	Yes	Audio Resource played for a special day
Greetings activated	False , True	Yes	Activates the Greeting 1 and, if enabled, Greeting 2 announcements
Music File	Music In Queue , any valid audio resource	Yes	Audio Resource for music played while the caller is in the queue
Personality	Default Personality , other personality defined in GAX	Yes	The voice used in the announcements

Auto-attendant menus

[+] Show parameters.

Parameter	Values (default in bold)	Mandatory?	Description
Auto attendant menu activated	False , True	Yes	Activates an auto-attendant menu (such as Press 1 for Sales) for this parameter group
Touch tone 0	[none] , target parameter group	No	Distribution or Inbound parameter group selected when the caller selects 0

Parameter	Values (default in bold)	Mandatory?	Description
Touch tone 1	[none] , <i>target parameter group</i>	No	Distribution or Inbound parameter group selected when the caller selects 1
Touch tone 2	[none] , <i>target parameter group</i>	No	Distribution or Inbound parameter group selected when the caller selects 2
Touch tone 3	[none] , <i>target parameter group</i>	No	Distribution or Inbound parameter group selected when the caller selects 3
Touch tone 4	[none] , <i>target parameter group</i>	No	Distribution or Inbound parameter group selected when the caller selects 4
Touch tone 5	[none] , <i>target parameter group</i>	No	Distribution or Inbound parameter group selected when the caller selects 5
Touch tone 6	[none] , <i>target parameter group</i>	No	Distribution or Inbound parameter group selected when the caller selects 6
Touch tone 7	[none] , <i>target parameter group</i>	No	Distribution or Inbound parameter group selected when the caller selects 7
Touch tone 8	[none] , <i>target parameter group</i>	No	Distribution or Inbound parameter group selected when the caller selects 8
Touch tone 9	[none] , <i>target parameter group</i>	No	Distribution or Inbound parameter group selected when the caller selects 9

Business (reporting)

[+] Show parameters.

Parameter	Values (default in bold)	Mandatory?	Description
Department	[none] , <i>an item from the Department custom list for the parameter group</i>	No	A business organization used as a category in reporting
Flow	[none] , <i>an item from</i>	No	A business flow used as

Parameter	Values (default in bold)	Mandatory?	Description
	<i>the Flow custom list for the parameter group</i>		a category in reporting
Product	[none] , <i>an item from the Product custom list for the parameter group</i>	No	A product or product group used as a category for reporting
Segment	[none] , <i>an item from the Segment custom list for the parameter group</i>	No	A customer category used as a category for reporting
Service	[none] , <i>an item from the Service custom list for the parameter group</i>	No	Business categories typically used as the top level of the auto-attendant menu choices
Target virtual queue	[none] , <i>a target virtual queue set in GA</i>	No	A reporting entity set up in Genesys Administrator

Contact center status

[+] Show parameters.

Parameter	Values (default in bold)	Mandatory?	Description
Emergency declared	False , True	Yes	Activates the emergency announcement, overriding any other announcement
Open Hours	From Monday to Friday, 0800-2000, closed Saturday and Sunday , <i>value set for parameter group</i>	Yes	Sets the hours that you are open and accepting calls; to specify open hours on specific dates, you must place the date above all day-of-week entries
Special day	December 25, January 1 , <i>any dates</i>	No	A list of exceptions to the regular open hours, for a holiday or other reason.

Distribution

[+] Show parameters.

Parameter	Values (default in bold)	Mandatory?	Description
Default distribution parameter group	[none] , <i>parameter group</i>	No	The distribution parameter group that provides the default and

Parameter	Values (default in bold)	Mandatory?	Description
			overflow target for this parameter group; if you do not set this parameter, the call flow uses the originally defined list of targets and timeouts
Target 1	[none] , agent group	No	The first agent group to which the call is routed
Target 2	[none] , agent group	No	The second agent group to which the call is routed
Target 3	[none] , agent group	No	The third agent group to which the call is routed
Target 4	[none] , agent group	No	The fourth agent group to which the call is routed
Target 1 timeout	300 , integer between 0 and 99999	No	The timeout, in seconds, after which the call is routed to the next target agent group
Target 2 timeout	1 , integer between 0 and 99999	No	The timeout, in seconds, after which the call is routed to the next target agent group
Target 3 timeout	1 , integer between 0 and 99999	No	The timeout, in seconds, after which the call is routed to the next target agent group
Target 4 timeout	1 , integer between 0 and 99999	No	The timeout, in seconds, after which the call is routed to the next target agent group
Target overflow	[none] , a standard telephone number, such as 8005551212	No	The phone number to which a call is routed if the final Target timeout is exceeded or if no target agent group is specified. Important: you cannot use a routing point as this number.

Priority tuning

[+] Show parameters.

Parameter	Values (default in bold)	Mandatory?	Description
Priority Increment	0 , integer between 0 and 99999	No	Sets the number to add to the priority value each time the priority interval is exceeded
Priority Interval	0 , integer between 0 and 99999	No	The time interval (in seconds) between priority increments
Priority Limit	0 , integer between 0 and 99999	No	Sets the upper limit for priority increments; all calls at the maximum priority level receive equal treatment
Priority Start	1 , integer between 1 and 99999	Yes	The initial priority assigned to each incoming call

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