

ACD - How to use the Stair Function effectively

Introduction

Ever wondered what the stair function in combination with skill based routing is good for?

It can help you to distribute calls and events more effectively by:

- Having agents who should primarily answer calls to a group get the calls first.
- Have agents who are performing other tasks, such as:
 - Backoffice work
 - or Primary work for another ACD groupstill receive some calls if the waiting queue fills up.

How to configure?

You can apply the stair function to ACD groups as follows.

Switch on skill based routing for the ACD group

This will sort agents according to their assigned primary skill level in the ACD group - i.e. the skill level assigned to an agent when they are made a member of the ACD group.

Given the following configuration:

Agent	Skill
John Doe	20
Agent Ace	100
Agent Bob	50

If all three agents are free, then Agent Ace will receive the first call, followed by Agent Bob, and then John Doe.

Without the stair function, this algorithm applies immediately. So as soon as a third call is received by the system, assuming the other two agents are still speaking, John Doe will be given that call.

However, John Doe may be a highly skilled agent also working on a second business process in another ACD group.

Maybe, John Doe shouldn't be given the call immediately, since a call to the other ACD group, i.e. his primary activity, received a few seconds later, would then have to wait?

Enter the stair function ...

Switch on the stair function

We can decide how long the caller should wait before being connected to John Doe, by using the stair function.

Switch this on in the **Distribution** tab in the ACD group configuration:

Stair Function :

☒

Stair Function Time Interval :

10

▼

every x seconds the required skill level is lowered

Stair Function Skill Value :

10

▼

the required skill level is lowered by x

How does it work?

- The stair function starts looking for available agents with skill 100.
- Every **Stair Function Time Interval** seconds, the required skill level is lowered by **Stair Function Skill Value**.
- So after 10 seconds, the system also considers agents with skill 90, after 20 seconds 80 ... and so on.
- This means that **Agent Bob** will be presented with the call after 50 seconds, given the example configuration here.
- And **John Doe** will be presented with the call after 80 seconds.

What have we achieved?

Agent	What happens
Agent Ace	Agent Ace, because he has a skill level of 100 in the ACD group, will always be considered for calls immediately, assuming he is free and logged in for telephony events.
Agent Bob	Agent Bob will receive calls for this group, but only after 50 seconds have passed (5 time intervals, each 10 seconds long, and each time the system looks for agents with 10 skill less).
John Doe	Like Agent Bob, he will receive calls later. However due to his skill level, the minimum queueing time will be 80 seconds. This means, that if during these 80 seconds a call is received by the system for John Doe's primary activity, he will get this first.

What else can we do?

There are more tricks we can use. Just assume, that Agent Ace needs to send some important emails regarding his last call.

Agent Ace changes his ACD status to Backoffice Work.

ACD Status Configuration

We configure Backoffice work so that agents will continue to receive calls in this status:



Edit Agent Status "Backoffice"

Master Data

Skill Adjustment

Translations

ID : 81

Status : Backoffice

Status (short) :

Status (abbreviation) :

Font Colour : LightYellow

Background Colour : Red

Backoffice

Restrict to specific ACD groups : ☐

Restricts the visibility of this status to users who are members of certain ACD groups only.

Settable by Agent : ☒

Logged-In : ☒

In Location : ☒

Holiday : ☐

Pause : ☐

Calls : ☒

Post Call : ☐

Voice Mail : ☐

Outbound : ☐

Fax : ☐

Callback : ☐

SMS : ☐

Email : ☐

Ticket : ☐

Chat : ☐

Quick Status Buttons (Supervisor) : ☐

Distribute During Call : ☐

We also configure a skill adjustment for the ACD group concerned in the ACD status:

ACD Group	Stipulated skill value	Adjustment factor	Action
Zentrale (000)		0.1	Edit Delete

In this example, we have configured that agents in the group "Zentrale" should be given a skill adjustment of 0.1 when they are in the status "Backoffice".

What have we achieved now?

This means that when Agent Ace switches to backoffice, his skill assignment in the ACD Group will be multiplied by a factor of 0.1

- His new Skill in the ACD group will be $100 * 0.1 = 10$
- Only while he is in the status Backoffice. Otherwise it will revert to 100.

In combination with the stair function, this means that Agent Ace will only receive calls from the ACD group after 90 seconds waiting time, when he is in the status Backoffice.

Conclusions

- You can use the stair algorithm in addition to the skill based algorithm to influence how, and when your agents receive calls from an ACD group.
- The delay introduced by the stair function means that agents who have other primary tasks will get one of those tasks, as long as the task (call or event) arrives within the time interval required for that agent to be considered by the stair function.
- The time interval is variable - you choose how long callers should wait and how soon agents should help out with secondary tasks.
- If the agent still has no tasks, and the stair function has reached that agent's skill level, he will receive a call or event from a heavily loaded ACD group.
- Coupling this with the capability of changing agent skills depending on the status they are in, is a very powerful mechanism for controlling who gets what tasks, and when.