Outbound Contact Deployment Guide

Dynamic Port Allocation Between Campaign Groups

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Dynamic port allocation allows the optimization of dialing ports usage in configurations where multiple Campaign Groups share the same dialing and call progress detection resources (for example, Switch ports or CPD Server ports). This feature is only available for Campaign Groups running in the Progressive, Predictive, Progressive with Seizing and Predictive with Seizing dialing modes.

> **Important**
>
> Dynamic port allocation requires that Campaign Groups using the same dialer must all be running in either non-ASM mode or ASM mode. It does not support mixed-modes.

When dynamic port allocation is in effect, OCS performs the proportional dynamic allocation of ports, based on the estimated average numbers of ports required for each Campaign Group. OCS periodically recalculates these estimated numbers in accordance with the current dialing parameters, the number of available agents, and historical statistics. OCS calculates the maximum number of ports available for each Campaign Group so that this value is directly proportional to the estimated average number of ports required for this Campaign Group so that the sum of all these numbers for all Campaign Groups equals the total number of available ports.

Provisioning

Dynamic port allocation is configured by several parameters that combine to form a distinct configuration. The dynamic-port-allocation option defines whether dynamic allocation is in effect.

Dynamic Port Allocation in VoIP environments

For the dynamic allocation of ports among Campaign Groups running in a VoIP environment, OCS uses the total number of ports, which is reported by SIP Server in the **total-ports** parameter of EventResourceInfo messages, instead of the **channel_num** option that is defined for a Switch object.

Dynamic Port Allocation with CPD Server

In ASM mode with separated regular and engaging ports, OCS performs a dynamic allocation of ports when the Number of CPD ports property of the Campaign Group or the asm_channel_num option is set to 0.

For ASM mode with separated regular and engaging ports, the asm_channel_num option for these Campaign Groups can also be set to a desired value greater than 0. For these Campaign Groups, OCS will not perform dynamic allocation of ports, regardless of the dynamic-port-allocation option setting. In this case, OCS reserves ports for these running Campaign Groups in accordance with their Number of CPD ports property and the asm_channel_num option setting.

To restrict the maximum number of engaging ports that can be used for a Campaign Group in ASM

mode, the asm_channel_num option can be set to a desired value greater than 0. In this case, OCS performs dynamic allocation for this Campaign Group only if the Number of CPD ports property is set to 0.

To restrict the total maximum number of regular and engaging ports that can be used for a Campaign Group in ASM mode with separated regular and engaging ports, the Number of CPD ports property can be set to a desired value greater than 0. In this case, OCS performs dynamic allocation for this Campaign Group only if the asm_channel_num option is set to 0.

Examples

The following three examples describe how ports are allocated dynamically between Campaign Groups that share the same dialing and CPD resources:

Example 1

- OCS runs two Campaign Groups which dial calls in Predictive mode through the same Switch using T-Server as a dialer. The channel_num option for the Switch configuration object is set to 100, and the dynamic-port-allocation option is set to true for the same Switch object. Both Campaign Groups have the Number of CPD Ports property set to 0. OCS estimates the required number of ports for those Campaign Groups to be 20 and 30. Since the total number of ports is configured as 100, the maximum number of ports allowed for the Campaign Groups are 40 and 60, respectively.

Example 2

- OCS runs two Campaign Groups which dial calls in Progressive mode through the same CPD Server. CPD Server is configured to use a total of 25 ports. The dynamic-port-allocation option is set to true at the CPD Server Application level. Both Campaign Groups have the Number of CPD Ports property set to 0. OCS estimates the required number of ports for the Campaign Groups to be 20 and 30. The total number of available ports is 25, therefore, the maximum number of ports that are actually available for the Campaign Groups are 10 and 15.

Example 3

- OCS runs two Campaign Groups which dial calls in Progressive mode through the same CPD Server. CPD Server is configured to use a total of 50 ports. The dynamic-port-allocation option is set to true at the CPD Server Application level. Both Campaign Groups have the Number of CPD Ports property set to 0. OCS estimates the required number of ports for the Campaign Groups to be 5 and 100. OCS considers the number of ports required by the first Campaign Group as *small*, since 5 > (50 / 2 * 0.3). Therefore, the maximum number of ports available for the Campaign Groups are 5 and 45.