

Simplifying Skills-based Call Routing: Comms Router Adds a GUI



By OLIVER SCHLIEBEN

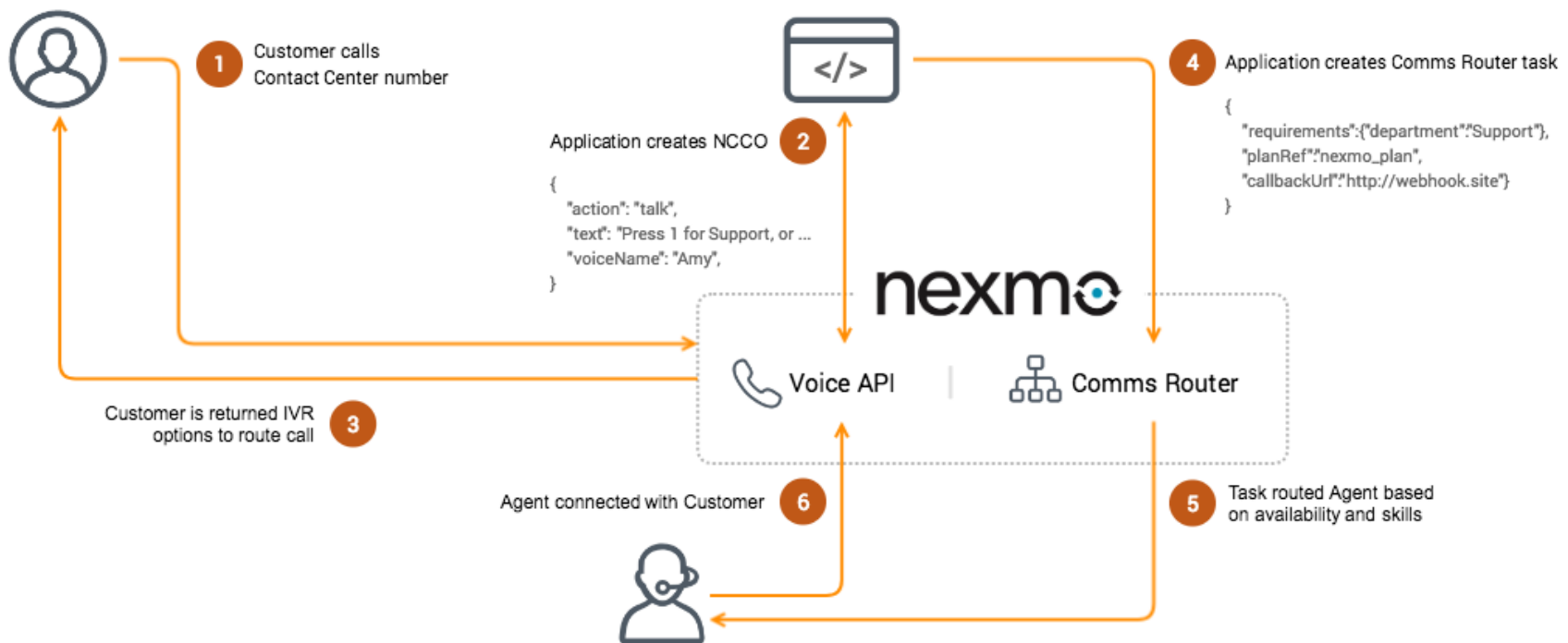
Nexmo creates programmable building blocks for businesses to create scalable communications solutions. Nexmo customers can either leverage the entire platform or adopt the building blocks à la carte, using only the key APIs or components they require to augment their existing solutions.

The Flexible Contact Center

For customers who want to move their Contact Center solutions to the cloud, Nexmo, as part of the larger Vonage product suite, provides a variety of components to address their needs.



We have created several contact center-focused building blocks, including the Comms Router open source API, a skills-based routing API for managing call queues and agent tasks with the Nexmo Voice product. The diagram below shows how the solution works.



Introducing the Comms Router User Interface

The latest Nexmo building block for the Contact Center is the Comms Router user interface (UI), which centralizes the management of agents, queues, routing configuration and task monitoring in a single console for Contact Center administrators.

Deploying Comms Router offers a tremendous amount of value to any Contact Center solution, as it allows businesses to keep up with their continually evolving Contact Centers. New agents are hired, agents that have been around for a long time leave or continue to expand their skill sets, and new products are offered. All of these changes require updates to your skills-based routing, so we have built a new application to enable administrators to manage the Contact Center solution via an intuitive UI. Contact Center administration can now be handled by a single business user without having to engage technical resources.

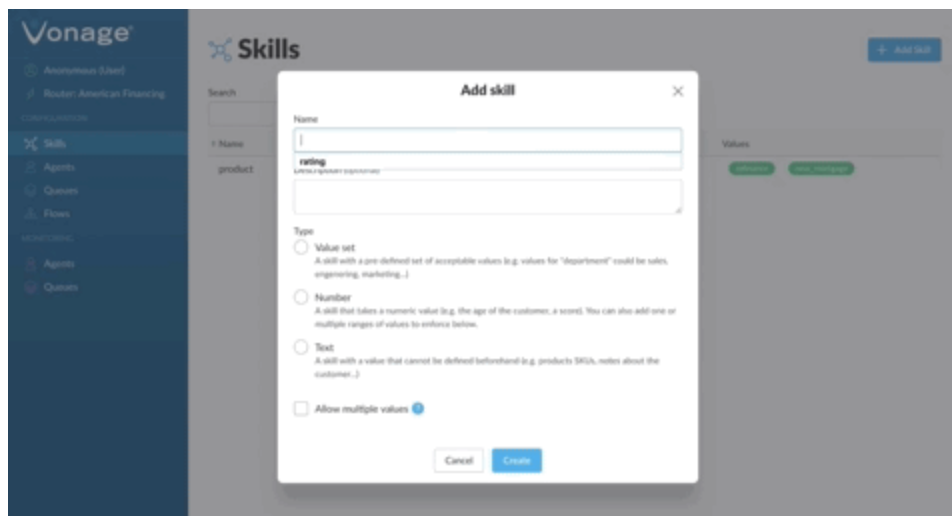
With the UI application, new tags can be assigned to agents as they learn new skills, maximizing the pool of capable agents for any given caller. Agents can also be easily pulled out of or added to the pools as they leave or come on board. This not only reduces callers' wait time but also helps ensure that the Contact Center itself is operating as efficiently as possible.

Components of Comms Router UI

The new UI reflects the capabilities of the API in an easy-to-use web interface, exposing its resources and endpoints.

Skills

Skills are the tags that are assigned to an agent to define which queues they are automatically put into for tasks. Adding a skill or set of skills to attach to an agent can be as simple as selecting from a simple dropdown list or filling in a text box.



Value sets

Value sets are predefined values to match against, either as a single value or multiple values. For example, if a department is Sales or Support the value set would be department = "Sales" OR "Support" . Multiple values can be used if the “Allow multiple values” checkbox is selected, enabling administrators to match against multiple values.

Numbers and number ranges

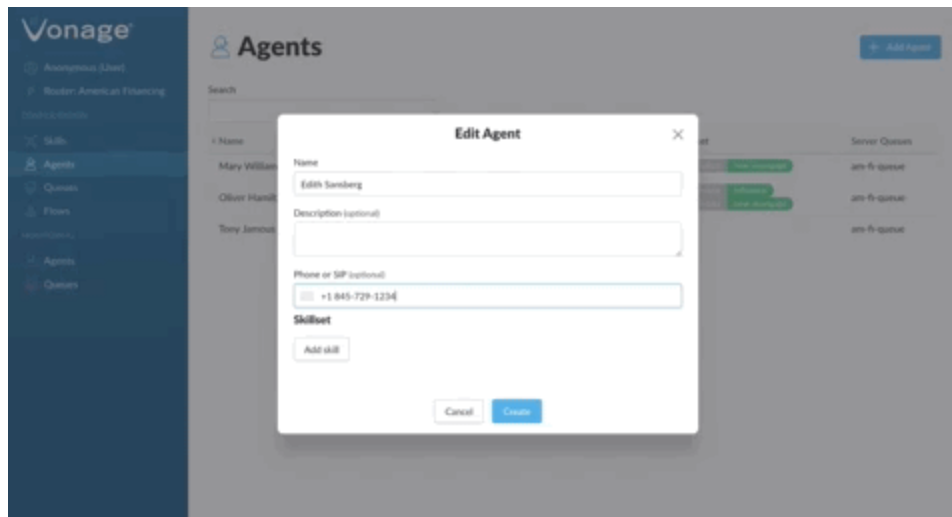
Numbers and number ranges are defined as a single numeric value (1, 2, 3) or a range of numeric values. For example, if you wanted to use a single value such as “Press #1 for Sales” you would use "Number" = 1 . With ranges, you can match between multiple values. For example, number of years left for mortgage repayments would be defined like this: "Years Remaining" BETWEEN 5 AND 10 .

Free-form text values

Free-form text values are strings that will be validated as a regular expression value. For example, a skill input value will be the same as a skill saved value or one that contains a specific value "Product SKU" CONTAINS 123 . Text types are useful for matching values that may vary depending on the entry point to a Contact Center such as a phone number or the product ID a customer is enquiring about.

Agents

Managing agents is simple within the user interface. Simply click on the “add a new agent” button or on the agent row in the table to edit. You can edit their name, description, and phone number (number or SIP URI), assign predefined skills and save.

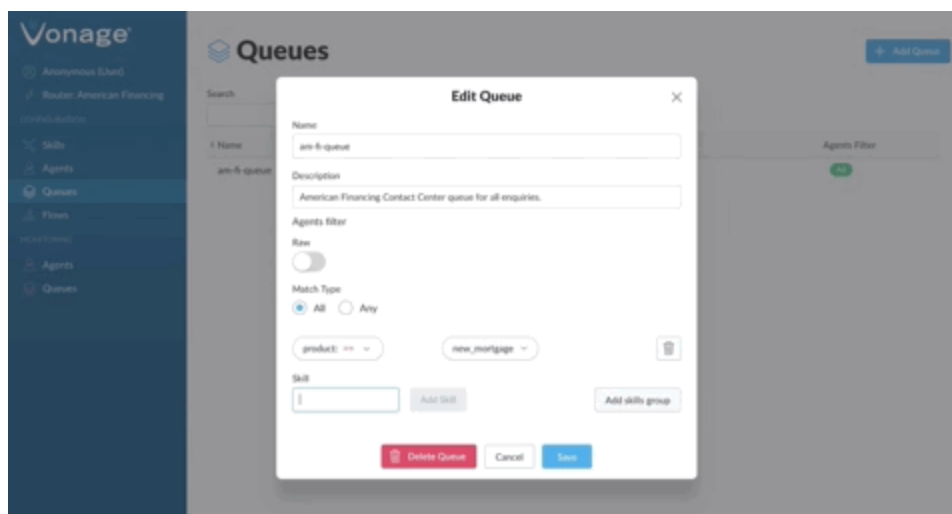


Queues

In order to route incoming tasks you need to set up and configure a queue. The queue automatically maps tasks to agents depending on their skills and availability (status).

Adding skills to a queue follows the same process as adding skills to an agent. Search by typing the skill name and selecting it from the results. Once you have selected a skill, you can update the value in the dropdown.

One of the key features of Comms Router skill sets is the ability to nest conditions. Nested conditions are useful if you need to match against multiple values based on a single parent value. For example, if you would like to route a call to the Customer Support team using a skill "Value set" and there are product specializations within Support, you can use the following configuration IF department = "Support" AND product = "new mortgage" .



Flows

Flows enable the tasks to be routed effectively. They are made of the following components:

- rule set
- rule action

- default queue

Similar to queues, rule sets define the logic that routes a task, which includes which skills are required to route a task to a specific queue. Rule sets also include the ability to add nested conditions to map multiple values to route the task.

Rule actions are designed to associate a queue and set the priority and timeout. Priorities are designed to order all tasks against available agents, so if an agent has the skills for more than one queue the queue with the highest priority will be served first.

A default queue has to be added to a Flow in case a task matches none of the rule set conditions or all other available agents are unavailable.

Agent availability

To manage the availability of agents, the UI provides a separate screen where you can view and set their status. From the Monitor > Agents screen you can see all of the agent information and have the ability to change agent’s status from “offline” to “ready.” If an agent is on a call their status will be “busy.”

Vonage®

Anonymous (User)

Router: American Financing

CONFIGURATION

Skills

Agents

Queues

Flows

MONITORING

Agents

Queues

Agents

Search

Refresh Interval (seconds)

15

Name	Address	Skillset	State	Last Busy	Action
Mary Williamson	+1 201-500-1234	<div>product</div> <div>new_mortgage</div>	Offline	Never	
Oliver Hamilton	+1 201-500-1235	<div>product</div> <div>refinance</div> <div>product</div> <div>new_mortgage</div>	Offline	Jul 10, 2018, 5:02 PM	
Tony Jamous	+1 845-729-1234		Offline	Jul 11, 2018, 11:39 AM	

View Tasks and Statuses

It’s important to see in real time how many tasks are in progress and the status of those in the queue. In the Monitor > Queues screen, it is possible to see both information about the number of tasks in a specific queue as well as the status of each task waiting, assigned or completed .

Customise Your Contact Center with Comms Router

To see out how Nexmo Platform tools such as Comms Router and its new UI enable you to seamlessly connect, customize and manage all your contact center capabilities, request a demo today.

Please fill out the form and we will be in touch with you shortly.

1.844.324.0340

First Name	Last Name
Email Address	Phone Number
Are you a Developer?	Company Name
Select Country	Product of Interest
Existing traffic to switch?	Traffic Volume Monthly (Optional)
Message (optional)	