

# Skill-Based Routing in FortiVoice Enterprise

When a customer dials an organization's support line they are commonly greeted with an automated attendant that transfers the customer's call to a specific department based on the number the customer selects.

This recipe guides you through the process of configuring FortiVoice Enterprise (FVE) to transfer customer calls to the most qualified agent.

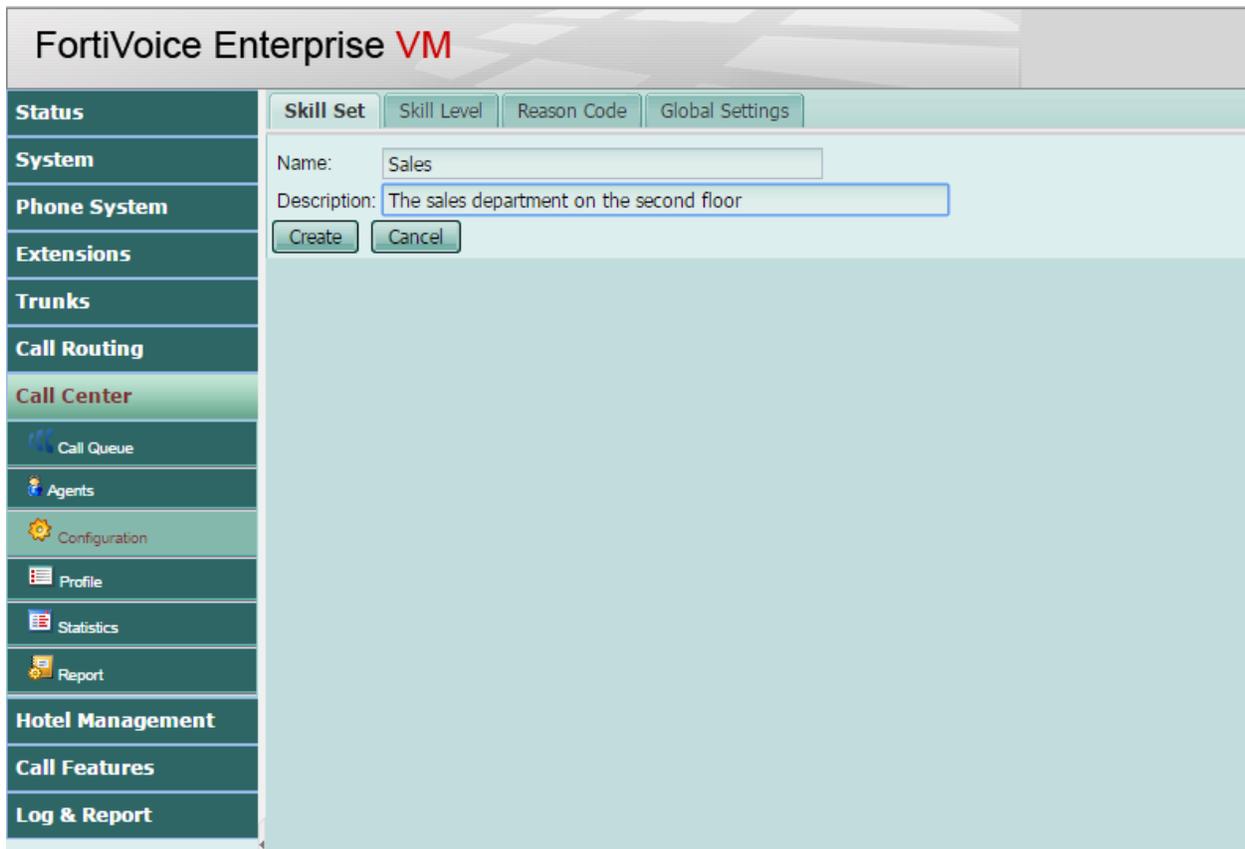
Skill-based routing is configured using FVE's call center, extension, and virtual number features.

**Note:** This recipe assumes you use the FVE 5.0 software.

## Creating Skill Sets

First you need to create custom skill sets for different departments. For example, you may want to create a Sales and Shipping department.

1. On the FVE web UI, go to **Call Center >Configuration > Skill Set**.
2. Select **New**.



3. Enter a name and description of your skill set.
4. Select **Create**.

## Configuring the Skill Levels

Once you have your skill sets created you will need to set their individual skill levels.

1. Go to **Call Center > Configuration > Skill Level**.

# FortiVoice Enterprise VM

FortiVoice Enterprise VM interface showing the Skill Level configuration page. The left sidebar contains navigation options: Status, System, Phone System, Extensions, Trunks, Call Routing, Call Center (selected), Call Queue, Agents, Configuration, Profile, Statistics, Report, Hotel Management, Call Features, and Log & Report.

The main content area displays a table of Skill Levels with columns for Level and Description. The table shows levels 10 through 90, with descriptions ranging from "level 10, junior" to "level 90, senior".

Navigation and control elements include: Skill Set, Skill Level (selected), Reason Code, and Global Settings tabs; New..., Edit..., and Delete actions; Page 1 / 1; and Records per page: 50.

Level	Description
10	level 10, junior
20	level 20, junior
30	level 30, junior
40	level 40, intermediate
50	level 50, intermediate
60	level 60, intermediate
70	level 70, senior
80	level 80, senior
90	level 90, senior

2. Create new levels by selecting **New** or select **Edit** to edit existing levels.
3. Go To **Extension > Extensions > IP Extensions**.
4. Select an agent's extension and then select **Edit**.
5. Select **Enable** from the Call Center section and then select **Configure**.

FortiVoice Enterprise VM

Status IP Extensions Remote Extensions Fax Extensions Preferences Voice Messages

System

Phone System

Extensions

Groups

General Voicemail

Virtual Number

Trunks

Call Routing

Call Center

Hotel Management

Call Features

Log & Report

Extension Setting

User ID: 181

Number: 181  Show suggested numbers

Enabled:

Display name: Ross Geller

External caller ID:  e.g, Jim <612223>

**Password policy is disabled**

SIP password:    View password

User PIN:    View PIN

Authentication type: Local

Phone language: --Default--

Preference: [\[Edit preference...\]](#)

Advanced Setting

Location: Internal

SIP setting: sip\_setting\_default

User privilege: allaccess

Account code:

Department: office1

Phone type: FortiFone-670i

MAC address: 00:a8:59:d8:34:a2

Phone profile:  Admin defined  User defined

Default-FortiFone-670i

Call Center

Agent:  Disable  Enable

[\[Configure...\]](#)

Voice Mailbox

Extra Information

IP: -

6. Select **New** in the Skill Sets section.
7. Select the appropriate Skill and Level from the dropdown menus.
8. Select **Create** and then **OK**.

Repeat steps 4-8 for the agents with the configured skill sets.

## Configuring the Call Queue

Now you will need to establish how calls will be handled based on the set skills.

1. Go to **Call Center > Call Queue > Call Queue**.
2. Create a new Call queue by selecting **New** or edit an existing one by selecting the Que and then **Edit**.

<b>Status</b>	<b>Call Queue</b>
<b>System</b>	<b>Call Queue</b>
<b>Phone System</b>	Queue ID: <input type="text" value="q1"/>
<b>Extensions</b>	Number: <input type="text" value="400"/> <input type="checkbox"/> Show suggested numbers
<b>Trunks</b>	Status: <input checked="" type="checkbox"/>
<b>Call Routing</b>	Display name: <input type="text" value="q1"/>
<b>Call Center</b>	Description: <input type="text"/>
<b>Call Queue</b>	<b>Queue Setting</b>
<b>Agents</b>	Maximum queue capacity: <input type="text" value="20"/> <b>[ Overflow call handling ]</b>
<b>Configuration</b>	Maximum queuing time: <input type="text" value="30"/> (Minutes) <b>[ Timeout call handling ]</b>
<b>Profile</b>	Ring duration: <input type="text" value="20"/> (Seconds)
<b>Statistics</b>	Music on hold: <input type="text"/>
<b>Report</b>	<b>Call Distribution</b>
<b>Call Features</b>	<input checked="" type="checkbox"/> Skill Based Routing <input type="text" value="Highest level first"/>
	Distribution policy: <input type="text" value="Round robin"/>

3. Select **Skill Based** from the Distribution policy in the Call Distribution section.
4. Select **Skill Based Routing** and choose a routing option:

**Lowest level first:** the call transfers to the agent with the lowest skill level score first and then moves up the ranks to the first available agent

**Highest level first:** the call transfers to the agent with the highest skill level score first and then moves down in rank to the first available agent.

5. Select a call Distribution policy. This option only applies to the situation when you have agents with the same skill level in a queue. In such cases, calls are distributed to these agents according to this policy.
6. Select **OK**.

## Configuring Call Handling

Now you will need to establish how calls are handled.

1. Go to **Extensions > Virtual Number > Virtual Number**.
2. Select **New** to configure the Call Handling option to route the skill-based calls. Two actions are needed. One is to tag the call with a skill so that it is processed as a skill-

based call. Another action is to route calls to queues where the agents with configured skill levels belong to.

The screenshot displays the FortiVoice Enterprise VM web interface. On the left is a navigation sidebar with the following menu items: Status, System, Phone System, Extensions (highlighted), Extensions, Groups, General Voicemail, Virtual Number, Trunks, Call Routing, Call Center, Hotel Management, Call Features, and Log & Report. The main content area is titled 'Virtual Number' and contains two sections: 'Virtual Number' and 'Call Handling'. The 'Virtual Number' section includes input fields for Name, Number, Display name, and Comment, along with an 'Enabled' checkbox (checked) and a 'Show suggested numbers' checkbox (unchecked). The 'Call Handling' section features a toolbar with 'New...', 'Edit...', 'Move', and 'Delete' icons, and a table with columns for 'Schedule', 'Action', and 'Target'. Below the table are 'Create' and 'Cancel' buttons.

3. Select **New** under the **Call Handling** section.
4. Select **Call queue skill tag** from the Action dropdown menu.
5. Select one of your previously created skills from the **Skill** dropdown menu and then select **Create**.
6. Select **New** under the **Call Handling** section.
7. Select **Call Queue** from the Action dropdown menu.
8. Select the location where you want to route the calls to from the Call queue dropdown menu and then select **Create**.
9. Select **Ok**.