

A Visual Guide to VoipNow Charging

Here's a visual guide to help you better understand the charging flow in VoipNow.

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Charging levels

VoipNow comes with 4 charging levels: Administrator, Service Provider, Organizations and Users. Each level is charged by the upper entity:

- The Administrator is charged by the SIP channel provider
- The Service provider is charged by the Administrator
- The organization is charged by the Service Provider
- The Users are charged by Organizations.

Charging in VoipNow is based upon the idea of each level adding its own profit margin to the call cost.

Charging per level

Charging starts with the **channel call costs**: the administrator has to pay the SIP channel provider for terminating calls sent from VoipNow to the channel provider.

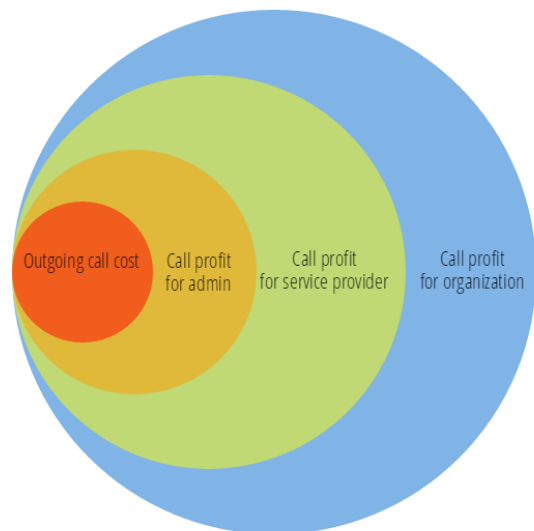
In order to make a profit, the administrator will add an amount of money on top of the **channel call cost** and charge the total cost for that call to the service provider. The **admin's call profit** is in the orange area.

The total admin cost (**channel call cost** in red together with the **admin profit** in orange) is charged to the service provider.

Then it's the **service provider's** turn to add his **profit** to the call cost, as paid to the admin - this is the green area. The total (**call cost** in red, **admin call profit** in orange and **service provider profit** in green) will be charged to the organization.

The **organization** adds its own **profit** (in blue) to the call cost - the final amount is what the user will pay to the organization for his calls.

To sum up: **call cost paid by an user = outgoing call cost + admin call profit + service provider call profit + organization call profit.**

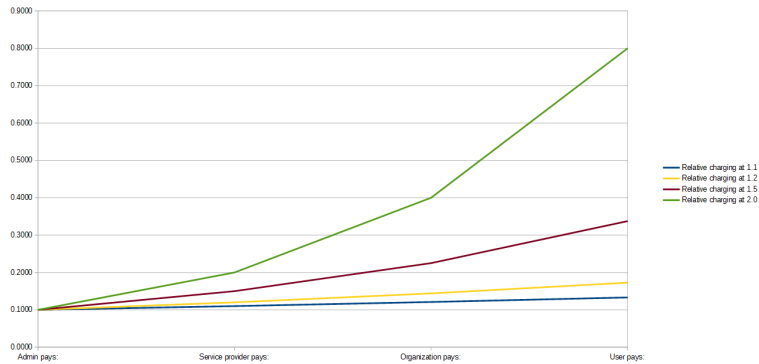


Examples

For relative charging

To make it easier to understand, we will assume that all examples refer to the same dialed number and the same profit margins for relative call charging. This is how much each level will pay for the same call in relative charging setups, if each level uses the given coefficient for relative charging (i.e. admin charges 1.1*channel call cost, service provider charges 1.1*admin call cost, organization charges 1.1*service provider call cost):

	Relative charging at 1.1	Relative charging at 1.2	Relative charging at 1.5	Relative charging at 2.0
Admin pays:	0.1000 USD/min	0.1000 USD/min	0.1000 USD/min	0.1000 USD/min
Service provider pays:	0.1100 USD/min	0.1200 USD/min	0.1500 USD/min	0.2000 USD/min
Organization pays:	0.1210 USD/min	0.1440 USD/min	0.2250 USD/min	0.4000 USD/min
User pays:	0.1331 USD/min	0.1728 USD/min	0.3375 USD/min	0.8000 USD/min



A simple formula can be given for relative call charging:

C_c = channel call cost
 C_l = call duration
 R_a = administrator relative charging coefficient
 R_s = service provider relative charging coefficient
 R_o = organization relative charging coefficient

Who	Pays	Is paid
Administrator	$C_c * C_l$ to the SIP channel provider	$C_c * R_a * C_l$ by the service provider
Service provider	$C_c * R_a * C_l$ to the administrator	$C_c * R_a * R_s * C_l$ by the organization
Organization	$C_c * R_a * R_s * C_l$ to the service provider	$C_c * R_a * R_s * R_o * C_l$ by the user
User	$C_c * R_a * R_s * R_o * C_l$ to the organization	

For a 10 minutes call with a channel cost of 0.1 USD and a global 1.1 relative charging coefficient, the user will pay $U_c = ((0.1 * 1.1) * 1.1) * 1.1) * 10 = 1.3310$ USD.

For fixed charging

This is how much each level will pay for the same call in fixed charging setups, assuming each level adds the same fixed amount to the call cost:

	Fixed charging +0.1 USD	Fixed charging +0.2 USD	Fixed charging +0.3 USD	Fixed charging +0.5 USD
Admin pays:	0.1000 USD/min	0.1000 USD/min	0.1000 USD/min	0.1000 USD/min
Service provider pays:	0.2000 USD/min	0.3000 USD/min	0.4000 USD/min	0.6000 USD/min
Organization pays:	0.3000 USD/min	0.5000 USD/min	0.7000 USD/min	1.1000 USD/min
User pays:	0.4000 USD/min	0.7000 USD/min	1.0000 USD/min	1.6000 USD/min

