

# How does call limitation work

Applies to VoipNow 3 and higher!

This article describes what call limitation is and how to set up the system so that you can route your calls to multiple extensions using ICR.

## What is call limitation

VoipNow offers the possibility to limit the maximum number of concurrent calls per account and per channel. This feature, generally known as call limitation, helps preventing abuse from users.

## How to limit concurrent calls for an account

The maximum number of concurrent calls can be set at service provider, organization and user level. You can set two limits, one for the public calls and one for internal calls. This is done from the account's **Roles and Phone Numbers** page.

For example, if you want to setup call limitation on **Service Provider** account, you can follow these steps:

**STEP 1:** Go to the Service Provider Management page.

**STEP 2:** Access the Roles and Phone Numbers section.

**STEP 3:** Set the Maximum public concurrent calls and Maximum internal concurrent calls.

Accepted values: `Unlimited` or numeric values.

## How VoipNow counts calls

VoipNow stores a counter for every account and channel that made/received at least a call.

When a call comes to the VoipNow system, a check is made if the call is for an entity on the server (extension or channel). Please read the situations below to understand how calls are counted.

### Local extension calls another local extension

The system identifies the parent service provider, organization and user of the calling extension and checks if their counters have not exceeded their maximum number of public calls. If they did not, their public concurrent calls counters are increased. After that, the system identifies the parent service provider, organization and user of the called extension and checks if their counters have not exceeded their maximum number of public calls. If they did not, their public concurrent calls counters are increased.

### Local extension calls public number

The system identifies the parent service provider, organization and user of the calling extension and checks if their counters have not exceeded their maximum number of public calls. If they did not, their public concurrent calls counters are increased. After that, the channel is identified and, if the counter is not exceeded, the channel's counter is increased.

### Public number calls local extension

The channel is identified and, if the counter is not exceeded, the channel's counter is increased. After that, the system identifies the parent service provider, organization and user of the called extension and checks if their counters have not exceeded their maximum number of public calls. If they did not, their public concurrent calls counters are increased.

## How concurrent calls limits affect the Incoming Call Rules

VoipNow allows you to filter an extension's incoming calls. As a result, when a caller is trying to reach the extension, VoipNow can perform a set of predefined actions.

A special case is when transferring a call using the **Transfer to** rule to multiple extensions. If the limit for internal concurrent call is smaller than the number of extensions you have set up your call to be transferred to, the call transfer will fail to reach all extensions.

## Scenario

To understand exactly how this happens, please follow scenario described below:

Extension 0003\*001 (08040) has a transfer rule to extensions 0003\*002, 0003\*011 and public number 0804993222. It also has selected to call itself.

The client that the extension belongs to has set up the following limits in the **Roles and phone numbers** section:

- Maximum public concurrent calls: 1;
- Maximum internal concurrent calls: 1.

Extension 0003\*002 receives a call from 0804188581 (external incoming call). 002, 011 and 0804993222 start ringing. Only 002 is ringing from the local extensions.

#### Add Incoming Call Rule

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+

Transfer to

number(s)

002 011 0804993222

and ring these for

30

seconds

when CallerID

is any

and call is in time interval

anytime

and extension status is

does not matter

and call status was

does not matter

Before connecting the caller to destination

do not ask

for his name.

Also

allow

public called destinations to transfer calls.

Also call

extension 0003\*001.

Add in position

1

. Can be managed from the extension with keypad code

. Do not follow

other rules when call is not completed.

This behavior is determined by the fact that the extension account can only process one public call and one internal call at a time. The rule above would require 2 public concurrent calls and 3 internal concurrent calls so that it could be processed.

## Ensuring transfer works as intended

If you want your call to be transferred as intended, you must make sure that your account has set up a high enough limit for the public and internal concurrent calls so that all your configured incoming call rules are able to transfer to all extensions.

## Related articles

- [Troubleshooting CallNow calls that drop](#)
- [Understanding the Call Reports in VoipNow](#)
- [How to transfer incoming calls to another extension voicemail](#)
- [Understanding the differences between a free and a paid channel](#)
- [Troubleshooting calls and debug steps](#)