# Set Up Role Parameters

This document describes the parameters that can be assigned on a role basis.


- Overview
- Static Fieldsets
- Dynamically Generated Fieldsets


## Overview

In order to set up a role's parameters, click the role's name in Node Listing.

Depending on the type of role you want to assign on the node, the web interface will display different options for you to choose from. This article describes all of these options.

You are provided with several options grouped into the following areas:

- **Information** - shows quick information about the node
- **Role Properties** - selection of the role and various other parameters
- **Listen to Network** - shows all fields related to the role binding on the interfaces
- **Internal Connectivity** - shows how the role will be connected in the Distributed Infrastructure.
- **Customer Connectivity** - show information related to how users connect to the service exposed by the role (if any).

Except for the **Information** area, which is common for all node types, the other fieldsets are dynamically generated based on the type of the role.

## Static Fieldsets

The **Information** fieldset contains some information about the node:

- **Eligible roles:** The eligible roles are listed. The system automatically determines the roles that are eligible for setup on the node. This field is only available on node add.
- **Private IPs:** The list of private IPs on the node, as setup by the user on the node.
- **Public IPs:** The list of public IPs on the node, as setup by the user on the node.

## Dynamically Generated Fieldsets

Take extra care when setting the Customer Connectivity, because these are the addresses exposed to your customers. They will be able to see them in the VoipNow's web management interface and more importantly they will have to point their devices such as browsers and phones to them.

**SQL**

| **Role Properties** | |
|---|---|
| **Role** | Select between eligible roles. On edit, this field is read-only. |
| **Shard** | Select a shard. For the moment, you can only select: Main. |
| **Type** | Select the SQL node type:<br>• Master<br>• Slave<br><br>Default: slave |
| Listen to Network | |
| **Bind IP : Port** | Specify IP and port where the role binds to.<br>Default IP: the first private IP address on the node, if does not exist the first public IP.<br>Default port: 3306. |
| Internal Connectivity | |
| **Connection IP : Port** | Specify IP and port (no hostname). This is relevant for connection between roles only.<br>Default IP: the private IP of the node, otherwise the public IP.<br>Default port: 3306. |

**Distributed Database**

| **Role Properties** | |
|---|---|
| **Role** | Select between eligible roles. On edit, this field is read-only. |
| **Shard** | Select a shard. For the moment, you can only select: Main. |

| | |
|---|---|
| **Availability Group ID** | Specify the group's name. Must be alphanumeric and have fixed length of 8 characters. |
| Listen to Network | |
| **Bind IP : Port** | Specify the IP and port where the role binds to.<br>Default IP: the first private IP address on the node, if does not exist the first public IP.<br>Default port: 11211. |
| Internal Connectivity | |
| **Connection IP : Port** | Specify IP and port (no hostname). This is relevant for connection between roles only.<br>Default IP: the private IP of the node, otherwise the public IP.<br>Default port: 11211. |

Please note that the Distributed Database role **cannot be assigned** if there are more than 3 extensions on the server.

**Queue**

| **Role Properties** | |
|---|---|
| **Role** | Select between eligible roles. On edit, this field is read-only. |
| Listen to Network | |
| **Bind IP : Port** | Specify the IP and port where the role binds to .<br>Default IP: the first private IP address on the node, if does not exist the first public IP.<br>Default port: 5672. |
| Internal Connectivity | |
| **Connection IP : Port** | Specify IP and port (no hostname). This is relevant for connection between roles only.<br>Default for IP: the private IP of the node, otherwise the public IP.<br>Default for port: 5672. |

**Management Interface**

| **Role Properties** | |
|---|---|
| **Role** | Select between eligible roles. On edit, this field is read-only. |
| Listen to Network | |
| **Bind IP** | Specify the IP where the role binds to.<br>Default: the first public IP address on the node. |
| **HTTP port** | The HTTP port.<br>Default 80, cannot be changed. |
| **HTTPS port** | The HTTPS port.<br>Default 443, cannot be changed. |
| Internal Connectivity | |
| **Connection IP : Port** | Specify IP and port (no hostname). This is relevant for connection between roles only.<br><br>Default for IP: the private IP of the node, otherwise the public IP.<br>Default for port: 443, cannot be changed. |
| Customer Connectivity | |
| **Public IP/Hostname : Port** | Specify IP and port . This is relevant for customer connection to the node.<br>Default the hostname of the node. |
| **HTTP port** | The HTTP port.<br>Default: 80, cannot be changed. |
| **HTTPS port** | The HTTPS port.<br>Default: 443, cannot be changed. |

Customer Connectivity is global for all nodes on the HTTP role.

**SIP**

| **Role Properties** | |
|---|---|
| **Role** | Select between eligible roles. On edit, this field is read-only. |
| Listen to Network | |
| **Bind IP** | Specify the IP where the role binds to.<br>Default for IP: the first public IP address on the node. |

| | |
|---|---|
| **UDP Port** | Specify UDP port.<br>Default 5060. |
| **TCP Port** | Specify TCP port.<br>Default 5060. |
| **TLS Port** | Specify TLS port.<br>Default 5061. |
| Internal Connectivity | |
| **IP/Hostname** | Specify IP/Hostname. This is relevant for connection between roles only (especially important when it comes to the connection with the PBX role).<br>Default: the hostname of the node. |
| Customer Connectivity | |
| **Public IP/Hostname** | Specify IP/Hostname. This is relevant for customer connection to the node.<br>Default: the hostname of the node. |
| **Private IP/Hostname** | Specify the connection IP or hostname.<br>This field is available only if the **Allow private connectivity for VoIP from/to** option is selected from the Set Up Infrastructure Properties . |
| **Direct Connection on Network** | Specify the connection IP.<br>This field is available only if the **Allow direct routing of VoIP to/from** option is selected from the Set Up Infrastructure Properties . |

The Customer Connectivity you set up here, applies only to the SIP role node that you are currently customizing.

Please note that for the Internal Connectivity and Customer Connectivity services, the UDP, TCP and TLS ports set up in the Listen to Network fieldset are used.

**PBX**

| **Role Properties** | |
|---|---|
| **Role** | Select between eligible roles. On edit, this field is read-only. |
| **MWI publishing port range** | Specify the MWI publishing port range.<br>Value range between 4000 and 4500.<br>Default: 4400, 4420 |
| **Capacity** | Specify capacity<br>Value range between 1 and 8092.<br>Default: 1000 |
| Listen to Network | |
| **Bind IP** | Specify the IP where the role binds to.<br>Default: the first public IP address on the node. |
| **UDP Port** | Specify UDP port.<br>Default UDP port: 5060 |
| Internal Connectivity | |
| **Connection IP/Hostname** | Specify the connection IP or hostname . This is relevant for connection between roles only.<br>Default IP: the public IP of the node. |
| **UDP Port** | Specify the UDP port.<br>Default port: 5060. |
| Customer Connectivity | |
| **Public IP/Hostname** | Specify the connection IP or hostname. This field depends on the infrastructure type you have chosen.<br>Default: the logic IP address setup previously. |
| **Private IP/Hostname** | Specify the connection IP or hostname.<br>This field is available only if the **Allow private connectivity for VoIP from/to** option is selected from the Set Up Infrastructure Properties . |
| **Direct Connection on Network** | Specify the connection IP.<br>This field is available only if the **Allow direct routing of VoIP to/from** option is selected from the Set Up Infrastructure Properties . |

Please note that only a single IP/port is allowed in the **Listen to Network**, **Internal Connectivity** and **Customer Connectivity** fieldsets.

In case the chosen infrastructure type is either NAT Cloud or Private/Public IP Cloud and the **Allow direct routing of VoIP to/from** option is enabled, the SIP and PBX roles should have their **Listen to Network IP** set to 0.0.0.0.

This is not done automatically - the respective nodes will have their status temporarily changed to `Damaged`. After the IP is changed, use the Fix Node link to put the node back into the `Online` status.