



Grandstream Networks, Inc.

External Users to Internal Server – Typical Network Solutions



Table of Contents

Typical Network Solutions - External Users to Internal Server	3
Scenario	3
Options Descriptions	4

Table of Figures

Figure 1: Network Deployment Diagram – External Users to Internal Server	3
Figure 2: Configure External Network Adapter and NAT	3
Figure 3: Service IP Address Config – Internal Network Adapter	4
Figure 4: Service IP Address Config – External Network Adapter	5

Table of Tables

Table 1: Parameters Descriptions	4
--	---



Typical Network Solutions - External Users to Internal Server

Scenario

The server is deployed on the internal network for external users. The users need to use the service via the public network. In this case, users need to configure the external network IP address and static NAT in the server. If the server is deployed on the internal network, and all participants need to use the service via public network, users need to configure the static NAT to ensure the certain public networks are able to access the server. Users could configure the External Network Adapter and NAT to complete the configuration. This deployment does not support users to access the server directly via the internal network. Otherwise, it may cause the abnormal issues for the conferences.

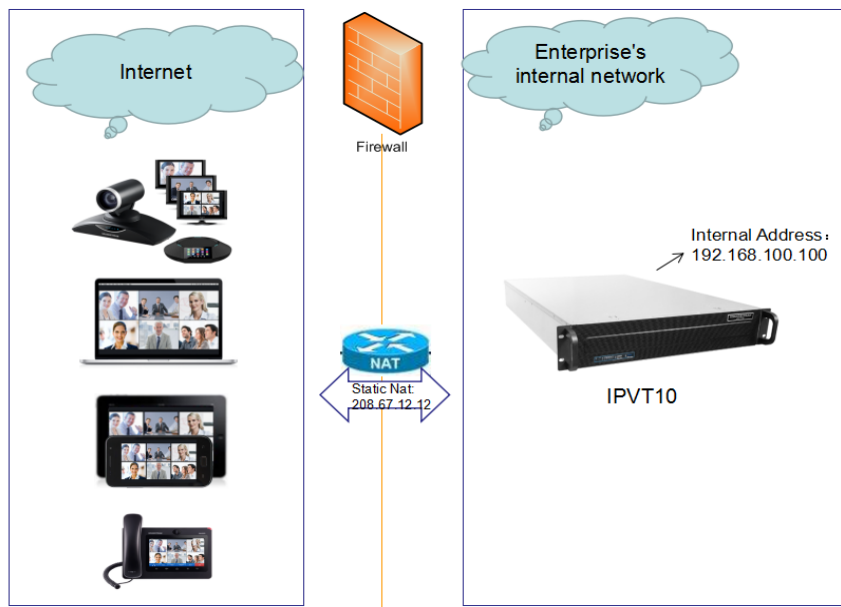


Figure 1: Network Deployment Diagram – External Users to Internal Server

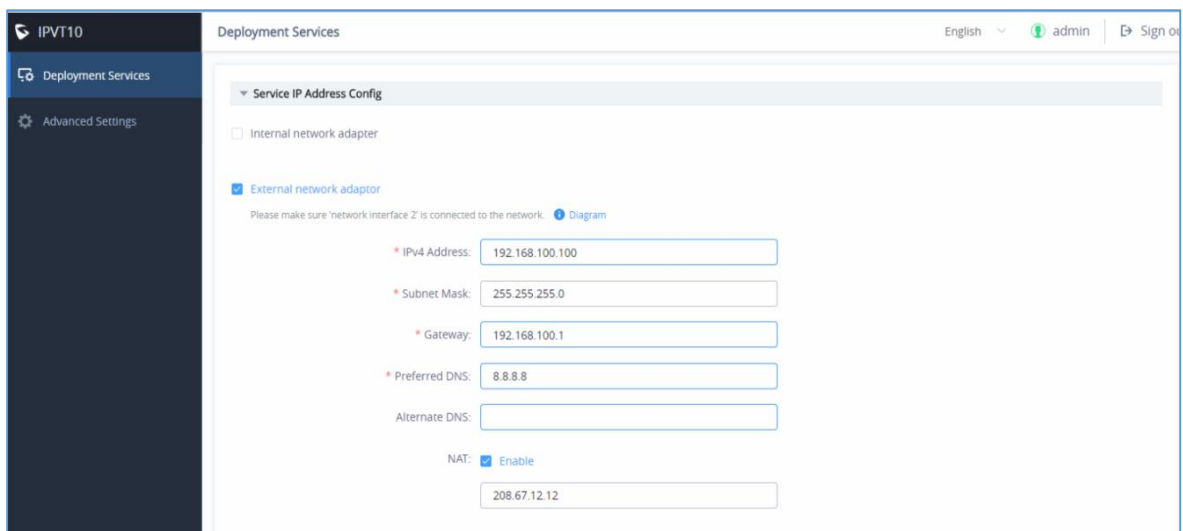


Figure 2: Configure External Network Adapter and NAT



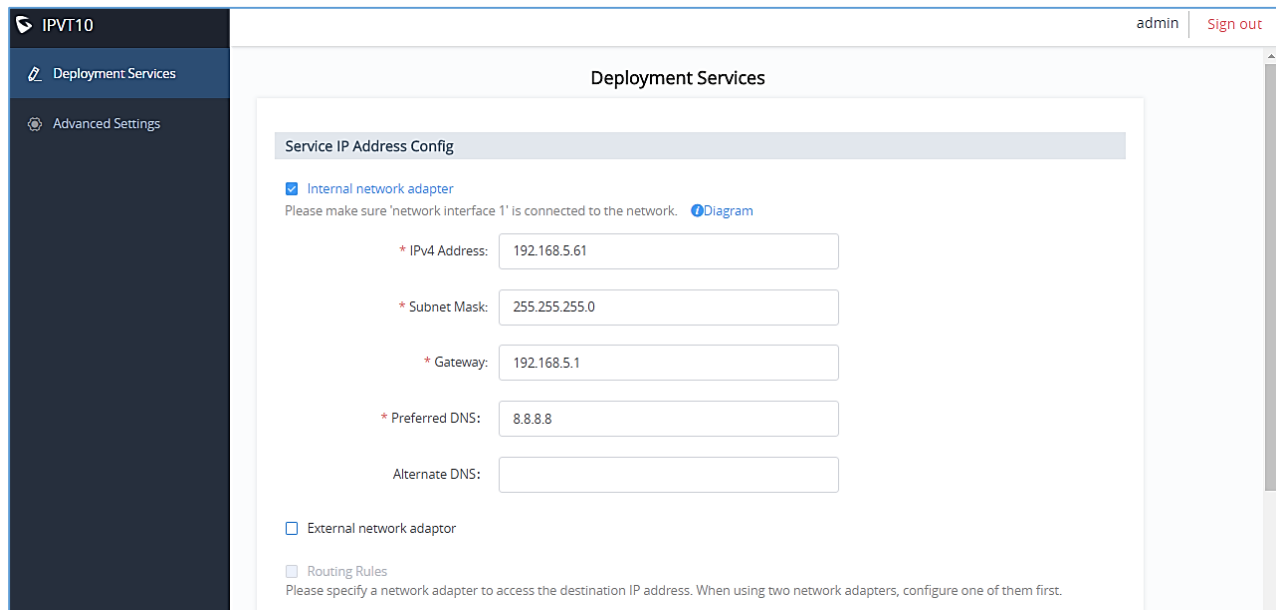
Options Descriptions

Table 1: Parameters Descriptions

Parameters	Description
Internal Network Adapter	Configures Internal Network Adapter's parameters.
External Network Adapter	Configures External Network Adapter's parameters.
IPv4 Address	Configures the IP Address for IPVideoTalk Portal.
Subnet Mask	Configures the Subnet Mask.
Gateway	Configures the default Gateway.
Preferred DNS	Set the Preferred DNS.
Alternative DNS	Set the Alternative DNS.
NAT	Enable/Disable NAT, and set the NAT IP address.
Routing Rules	Set the advanced configuration Routing Rules to ensure accessing the destination IP address when using two Network Adapters.

Please, refer to the following steps:

1. Login IPVT10 Web UI.
2. Go to “**Deployment Services**”, and configure “**Service IP Address Config**” options, as the figure shown below:



The screenshot shows the IPVT10 Web UI interface. On the left is a dark sidebar with navigation options: 'IPVT10', 'Deployment Services' (selected), and 'Advanced Settings'. The main content area is titled 'Deployment Services' and contains a sub-section 'Service IP Address Config'. Under this section, there are three radio button options: 'Internal network adaptor' (which is selected), 'External network adaptor', and 'Routing Rules'. Below the 'Internal network adaptor' option, there is a note: 'Please make sure 'network interface 1' is connected to the network.' followed by a 'Diagram' link. The configuration fields are as follows:

- * IPv4 Address: 192.168.5.61
- * Subnet Mask: 255.255.255.0
- * Gateway: 192.168.5.1
- * Preferred DNS: 8.8.8.8
- Alternate DNS: (empty field)

At the bottom of the configuration area, there is a note: 'Please specify a network adaptor to access the destination IP address. When using two network adapters, configure one of them first.'

Figure 3: Service IP Address Config – Internal Network Adapter

3. According to the actual requirements, users could configure the 1 or 2 network adapters. Users could configure Internal Network Adapter only, External Network Adapter only, or both.

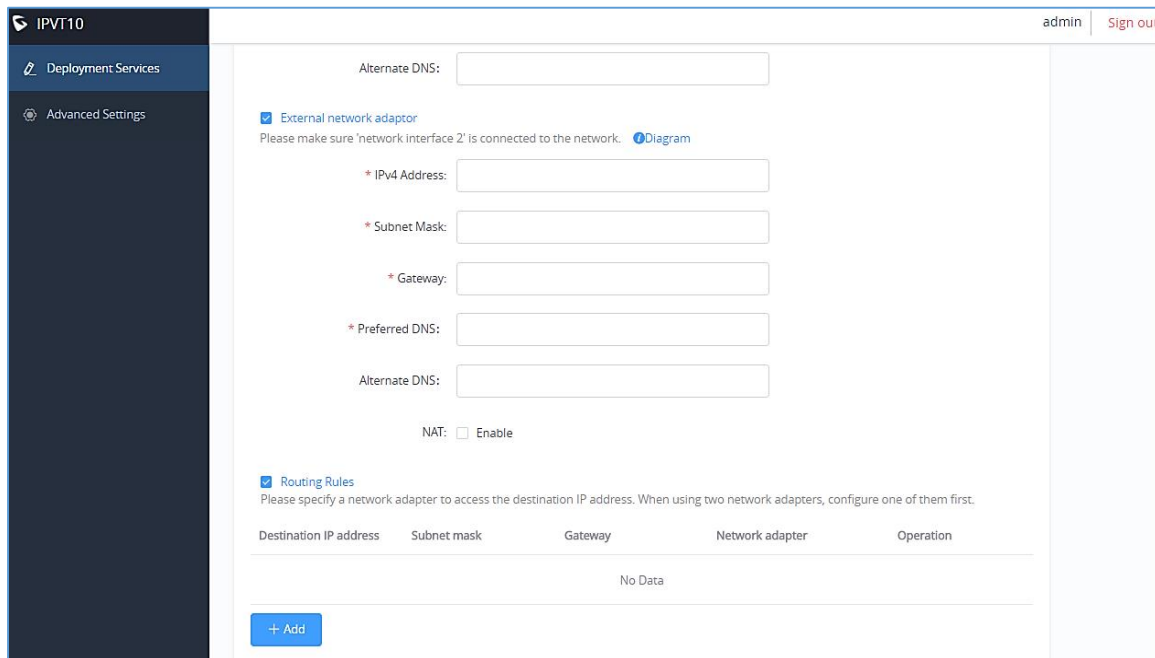


- Users need to configure “IPv4 Address”, “Subnet Mask”, “Gateway”, “Preferred DNS”, “Alternative DNS” (optional) for the network adapter.

Note: Please make sure that there should be no conflict in the IP address. Otherwise, the service will be unavailable.

- (Optional) If the selected adapter is external network adapter, users could configure static NAT for the IPVT10.

Note: NAT could translate the private IP address of the internal network into a public IP address, so that an external conference client can access the server of the internal network through the public network.



The screenshot shows the 'Advanced Settings' page for IPVT10. The 'External network adaptor' checkbox is checked. Below it, there are input fields for IPv4 Address, Subnet Mask, Gateway, Preferred DNS, and Alternate DNS. A 'NAT: Enable' checkbox is also present. The 'Routing Rules' section is also checked, and a table is shown with columns for Destination IP address, Subnet mask, Gateway, Network adapter, and Operation. The table currently contains 'No Data' and an '+ Add' button is visible at the bottom left of the table area.

Figure 4: Service IP Address Config – External Network Adapter

- Continue to fill in the other configuration options. For the first deployment, users have to fill in all required fields.
- Click on “Deploy to Server Now” to apply the entire configurations of this page to the server. When the deployment is complete, it will take effect immediately.

Notes:

- When the deployment is complete, users need to check whether all network interfaces of the server are all connected. For a single network, only one network interface needs to be connected to the network (Internal Network – Network Interface 1, External Network – Network Interface 2).
- If users modify the IP address of the server during the conferences, it may cause the abnormal issues for the ongoing conferences, and the scheduled conferences will be inaccessible.
- When users modify the parameters of the server, the server will restart the service automatically.

