

User's Guide
bintec R4100 / R4300
VoIP

Purpose This document is part of the user's guide to the installation and configuration of bintec gateways running software release 7.4.5 or later. For up-to-the-minute information and instructions concerning the latest software release, you should always read our **Release Notes**, especially when carrying out a software update to a later release level. The latest **Release Notes** can be found at www.funkwerk-ec.com.

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As multiprotocol gateways, bintec gateways set up WAN connections in accordance with the system configuration. To prevent unintentional charges accumulating, the operation of the product should be carefully monitored. Funkwerk Enterprise Communications GmbH accepts no liability for loss of data, unintentional connection costs and damages resulting from unsupervised operation of the product.

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Guidelines and standards bintec gateways comply with the following guidelines and standards:

R&TTE Directive 1999/5/EG

CE marking for all EU countries and Switzerland

You will find detailed information in the Declarations of Conformity at www.funkwerk-ec.com.

**How to reach Funkwerk
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1 VoIP Menu

The fields of the *VoIP* menu are described below.

R4100 Setup Tool [VOIP]: Configuration	Funkwerk Enterprise Communications GmbH MyGateway
Application Level Gateways >	
EXIT	

This menu is for configuring your gateway's Voice-over-IP (VoIP) functions.

Voice over IP uses the ►► **IP** protocol for voice and video transmission and not just for data transfer.

The main difference over conventional telephony is that the voice information is not transmitted over a switched connection in a telephone network, but divided into data packets by the Internet protocol and these packets passed to the destination over undefined paths in a network. This technology uses the infrastructure of an existing network for voice transmission and shares this with other communication services.

The *VoIP* menu provides access to the submenu **APPLICATION LEVEL GATEWAYS**.

2 Application Level Gateway Submenu

The **APPLICATION LEVEL GATEWAY** submenu is described below.

In order to allow IP telephones a connection to a VoIP provider, your gateway provides a SIP and MGCP Proxy which carries out the necessary NAT and fire-wall port mappings.

Proxy configuration is carried out in the **VOIP → APPLICATION LEVEL GATEWAY** menu.

R4100 Setup Tool		Funkwerk Enterprise Communications GmbH		
[VOIP] [ALG]: Application Level Gateway configuration		MyGateway		
Terminal administration				
MGCP Terminal configuration >				
SIP Terminal configuration >				
Description	Type	Status	Destination Port	LLT
-----	-----	-----	-----	-----
MGCP UDP 2727	MGCP	disable	2727	On
SIP TCP 5060	SIP	disable	5060	On
SIP UDP 5060	SIP	disable	5060	On
ADD	DELETE	EXIT		

By choosing an existing proxy or via **ADD**, you access the menu for proxy configuration.

R4100 Setup Tool	Funkwerk Enterprise Communications GmbH
[VOIP] [ALG] [ADD]: Application Level Gateway	MyGateway
Application Level Gateway settings:	
Description	NEW Gateway
Proxy Type	SIP
Adminstatus	enable
Destination Port	9999
Protocol	udp
Low Latency Transmission	on
SAVE	CANCEL

The **APPLICATION LEVEL GATEWAY** → **ADD/EDIT** menu consists of the following fields:

Field	Description
Description	Here you enter a proxy description.
Proxy Type	Here you choose the protocol the proxy is to relay. Available protocols are: <ul style="list-style-type: none"> ■ <i>MGCP</i> ■ <i>SIP</i>.
Adminstatus	Here you choose whether to activate the proxy. Available choices are: <ul style="list-style-type: none"> ■ <i>enable</i> (default) ■ <i>disable</i>.

Field	Description
Destination Port	Here you specify the port on which the VoIP provider listens for SIP or MGCP connections. You need to create a proxy for every port VoIP clients from your LAN should be allowed to connect to. Ports may be provider specific. Default is 2427.

Table 2-1: **APPLICATION LEVEL GATEWAY** → **ADD/EDIT** menu fields

The **APPLICATION LEVEL GATEWAY** menu provides access to the following sub-menus:

- **MGCP TERMINAL CONFIGURATION**
- **SIP TERMINAL CONFIGURATION**

3 MGCP Terminal configuration Submenu

The **MGCP TERMINAL CONFIGURATION** submenu is described below.

```

R4100 Setup Tool                Funkwerk Enterprise Communications GmbH
[VOIP] [ALG] [MGCP]: Connected Terminals                MyGateway

All known connected MGCP Terminals:

Ident      Alias      Status      IP-Address      Gateway
-----

                                DELETE                                EXIT

```

In **MGCP TERMINAL CONFIGURATION** you can survey the MGCP clients currently connected through your gateway as well as those that have successfully connected through your gateway before.

The menu serves as a display of clients known to the gateway and of basic connection parameters. You can remove unneeded or undesired clients, though.

The list of known clients is stored on the gateway so that all NAT and Firewall settings can be recreated after a reboot. VoIP clients inside your LAN will be reachable from the outside again immediately after the reboot, even if they have not yet registered with the proxy again.

4 SIP Terminal configuration Submenu

The **SIP TERMINAL CONFIGURATION** submenu is described below.

```

R4100 Setup Tool                               Funkwerk Enterprise Communications GmbH
[VOIP] [ALG] [SIP]: Connected Terminals       MyGateway

All known connected SIP Terminals:

Ident      Alias      Status      IP-Address      Gateway
-----

                                         DELETE                               EXIT

```

In **SIP TERMINAL CONFIGURATION** you can survey the SIP clients currently connected through your gateway as well as those that have successfully connected through your gateway before.

The menu serves as a display of clients known to the gateway and of basic connection parameters. You can remove unneeded or undesired clients, though.

The list of known clients is stored on the gateway so that all NAT and Firewall settings can be recreated after a reboot. VoIP clients inside your LAN will be reachable from the outside again immediately after the reboot, even if they have not yet registered with the proxy again.

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