Help anSwitch V6

SOLVE PROBLEMS WITH VOIP DEVICES

Contents

1 Introduction

This help describes how the user himself can solve problems with a VoIP device, e.g. SIP telephone, or analogue device, e.g. Fax, over a modern VoIP transmission network.

If the user cannot solve the problem, he / she can find out here which information he / she needs to provide for the provider support to help them efficiently.

Note	The functions and/or parameters listed in this article may not be available with your telephone provider.

2 Best practice: How do I start to solve my problem?

Best Practice	1.	Check that the telephone (VoIP device) is connected correctly. → See chapter "Basic check of the VoIP device" ↗
	2.	You are trying to get the phone (VoIP device) up and running, but now: ▸ It doesn't load its configuration from the VoIP Switch. → See chapter " The VoIP device doesn't load the configuration from the anSwitch V6!" ↗
	3.	You have already been able to make (inbound and outbound) phone calls with the VoIP device, but now: ▸ The telephone shows on its display that it has no connection to the VoIP Switch ▸ The telephone (VoIP device) is no longer available for incoming calls. → See chapter "The VoIP device doesn't register with the anSwitch V6" ↗
	4.	You have already been able to make (inbound and outbound) phone calls with the VoIP device, but now: ▸ You can no longer establish or receive connections. → See chapter " The VoIP device cannot establish or receive connections " ↗
	5.	You can make (inbound and outbound) phone calls with the VoIP device, but now: ▸ The voice quality is very poor. ▸ My counterpart doesn't hear me. ▸ I can't hear my counterpart. ▸ We don't hear each other. → See chapter "Poor, partly or completely missing audio transfer" ↗
	6.	Fax is only partially or not at all working: → See chapter "FAX transmission doesn't work or only partially " ↗

3 Basic check of the VoIP device

The following basic conditions must always be checked first:

1. Is the VoIP terminal correctly connected to the power supply?
   → Possible actions:
   ‣ Replace the power supply cable.
   ‣ Use a different outlet.

2. Is the VoIP terminal correctly connected to the data network?
   ‣ Plug the data cable into the correct port:
      ‣ At the VoIP device
      ‣ At the upstream IP device (IP router, xDLS modem, etc.)
   → Possible actions:
      ‣ Replace the data cable.

3. Does the VoIP device display the behavior and indicators described in its user manual?
   If it's not:
   → Possible actions:
      ‣ Contact the seller's or device manufacturer's support.

4. Does your data network connection work?

   If your Internet connection for your PC and the VoIP device is running via the same upstream device (xDSL modem, FTTH modem (fiber optic modem), cable modem), can the Internet be accessed via your PC?
   I don't know or if no:
   → Possible actions:
      ‣ Contact the support of the Internet provider.

Warning	Defective power cables must be replaced! Faulty power cables can be life-threatening!

4 The VoIP device doesn't load the configuration from the anSwitch V6!

Note	These instructions are only valid if: 1. You have an account for the provider's self-care GUI. 2. The VoIP device type can be configured via the provider's self-care GUI. → In case of doubt, contact the provider's support. For all other cases, the VoIP device must be configured according to the manufacturer's speci-fications!

How does the problem manifest itself:

You are trying to use the VoIP device for the first time or after a restart of the device with the default factory configuration, but:

‣ Nothing's working!

Verify in the user account of the self-care GUI (AdminCenter):

1. Click Tab "Phones"
2. Click Button [State...]
   ‣ The "Last Access" parameter does not display the date/time and IP address of the VoIP device.
   ‣ The "MAC provisioning" parameter does not display "done".

Check the following conditions and act:

1. Are the basic conditions fulfilled?
2. Is the VoIP device getting an IP address after connecting to the network?
   → Possible actions:
   ‣ Check network connection.
   ‣ Check DHCP service in your local IP network.
3. Is the web-based user interface of the VoIP device accessible and can you log in?
   → Possible actions:
   ‣ Check network connection.
   ‣ If the DHCP service is switched on in your local IP network, check via the telephone user or console interface whether the VoIP device obtains its IP address via DHCP.
4. Is the configuration of the VoIP terminal in factory defaults?
   If no:
   → Possible actions:
   ‣ Restart the device manually with the default factory configuration (see the user manual of the VoIP device)
5. Is the VoIP Switch available?
   or is the redirection server of the device manufacturer configured correctly?
   or is the redirection server of the device manufacturer reachable?
   → Possible actions:
   ‣ Contact the support of the telephony provider.

If the problem cannot be solved, contact the provider's support with the following information:

   ‣ Telephone number of the device which causes problems.
   ‣ Device type
   ‣ Date and time when the problem occurred.
   ‣ Description of the problem: "The VoIP device cannot load its configuration!"

5 The VoIP device doesn't register with the anSwitch V6.

> **Note** These instructions are only valid if:
> 1. You have a user account for the provider's self-care GUI.
>
> For all other cases, the VoIP device must be configured according to the manufacturer's operating instructions with the correct SIP credentials of your telephony provider!

How does the problem manifest itself:

The telephone (VoIP device) is used for the first time, or it has already been possible to make a phone call (incoming and outgoing), but:

‣ Neither an incoming nor outgoing connection can be established with the VoIP device.
‣ An outgoing connection can be established with the VoIP terminal, but it is not possible to reach it inbound.

Verify in the user account of the self-care GUI:

1. Click Tab "Phones"
2. Click Button [State...]

    ‣   At "Registrations" no user agent, no IP address, no contact is displayed.

Check the following conditions and act:

1. Are the basic conditions fulfilled?
2. Did the VoIP device load the configuration?

    If no:

    → Possible actions:

    ‣   Configure the device manually or via the VoIP Switch.

3. What does the log of the VoIP device show?

    → Possible actions:

    ‣   Act according to the instructions of the VoIP device.

If the problem cannot be solved, contact the provider's support with the following information:

‣   Telephone number of the device which causes problems.
‣   Device type
‣   Date and time when the problem occurred.
‣   Description of the problem: "The VoIP device cannot register!"

6   The VoIP device cannot establish or receive connections!

How does the problem manifest itself:

The telephone (VoIP terminal) has already been able to make (incoming and outgoing) calls, but now:

‣   The VoIP device cannot establish or receive connections to/from public or private vPBX phone numbers whose devices are verifiably working (e. g. checked with a mobile phone).

Check the following conditions and act:

1. Are the basic conditions fulfilled?
2. Has this VoIP device registered?

    → Possible actions:

    ‣   Check if the device is registered on the VoIP Switch.

3. For problems with incoming connections:

    ‣   Is a call forwarding active?

    → Possible actions:

    ‣   Check with *#00 if a call forwarding is configured and deactivate with *00 if necessary.
    ‣   If your VoIP device has a private vPBX phone number, have the vPBX administrator check if the call distribution is still working correctly.

4. For problems with outgoing connections:

    ‣   Check with another device, e.g. a mobile phone or other phone of the same vPBX, if the desired destination number is reachable.

    If no:

    → Possible actions:

‣   If you have a public phone number:
‣   Check if a TopStop has been exceeded?

- ▸ Is the desired destination number blocked by a RuleSet?
- ▸ Contact the support of the telephony provider.
- ▸ If you have a private vPBX number:
  - ▸ Check if you need a leading 0, another digit or no digit for outgoing calls to the PSTN.
  - ▸ Check if a TopStop has been exceeded?
  - ▸ Is the desired destination number blocked by a RuleSet?
  - ▸ Contact the vPBX administrator.

If the problem cannot be solved, contact the provider's support with the following information:
- ▸ Telephone number of the device which causes problems.
- ▸ Date and time when the problem occurred.
- ▸ Telephone numbers of the participating devices:
  - ▸ A number of the calling side
  - ▸ B number of the called side
- ▸ Description of the problem:
  - ▸ "A cannot make calls."
  - ▸ "A cannot receive calls."
  - ▸ "A cannot make calls to certain B numbers: "List of B numbers that cannot be called.

7 Poor, partly or completely missing audio transfer

How does the problem manifest itself:

The VoIP device can establish or receive connections. The voice transmission was fine on earlier connections, but not now.

- ▸ The voice transmission is disturbed:
  - ▸ B hears A disturbed.
  - ▸ A hears B disturbed.
  - ▸ The speech transmission is disturbed in both directions A <-> B.
- ▸ The voice transmission is missing in part or in full since beginning of the connection:
  - ▸ B does not hear A.
  - ▸ A does not hear B.
  - ▸ A and B do not hear each other.

Check the following conditions and act:
1. Are the basic conditions fulfilled?
2. Is the handset or headset connected correctly?
3. Is the microphone of the handset or headset not muted?
4. Are the volume levels for the loudspeaker and microphone on your telephone set correctly?
5. Is the problem only with a specific partner? If yes, the other party should check the volume of the microphones, headset and headset being used.
6. Remember:
   - ▸ Handsfree mode often produces poor voice quality.
   - ▸ Connections with mobile phones can be disrupted, especially when the call partner is traveling.

If the problem cannot be solved, contact the provider's support with the following information:
- ▸ Telephone number of the device which causes problems.
- ▸ Date and time when the problem occurred.
- ▸ Telephone numbers of the participating devices:

‣ ‣ A number of the calling side.

‣ ‣ B number of the called side.

‣ Description of the problem: "The voice transmission is disturbed:"

‣ ‣ B hears A disturbed.

‣ ‣ A hears B disturbed.

‣ ‣ The speech transmission is disturbed in both directions A <-> B.

‣ "The voice transmission is missing in part or in full since beginning of the connection:"

‣ ‣ B does not hear A.

‣ ‣ A does not hear B.

‣ ‣ A and B do not hear each other.

8 FAX transmission doesn't work or only partially.

In a VoIP environment FAX no longer achieves the same degree of reliability as before in an analogue or ISDN one. The FAX reliability depends on various factors such as the type of device, device settings and the way the device is connected to the IP network. It depends also on the quality of the transmitter and receiver of the peer FAX devices. Getting all these factors together a transmission may not even start or drop unexpectedly. The transmitted documents may be incomplete.

➔ The users must expect increasing difficulties in the future, especially for international transmissions.

How does the problem manifest itself:

‣ FAX transmission doesn't start.

‣ FAX transmission is dropped.

‣ The transmitted document is incomplete.

Check the following conditions and take action:

1. Adjust the FAX device configuration:

‣ Reduce the transmission speed to max. 9600bds.

‣ Switch OFF the error correction, e.g. EMC

‣ If the device offers a "VoIP mode" then experiment with it and check if the results are better.

If the problem cannot be solved, contact the provider's support with the following information:

‣ Telephone number of the device which causes problems.

‣ Device type

‣ Date and time when the problem occurred.

‣ Telephone numbers of the participating devices:

‣ ‣ A number of the calling side

‣ ‣ B number of the called side

‣ Description of the problem: "FAX Transmissions doesn't work".

➔ Don't expect a miracle from the support!