

KEN!



AVM KEN!

***ISDN and Internet
for Small Networks***

High-Performance ISDN by...



KEN!

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Typographical Conventions

The following typographical conventions and symbols are used in this manual to make it more readable and to emphasize important information:

Highlighting

The following table presents a short overview of the highlighting conventions used in this manual.

Highlighting	Command	Example
quotation marks	keys, buttons, program icons, settings pages, menus, commands	“Start / Programs” or “Enter”
capital letters	paths and files within floating text	SOFTWARE\INFO.PDF or README.DOC
pointed brackets	variables	<CD-ROM drive>
typewriter characters	entries made using the keyboard	a : \setup
gray and italics	information, tips and warnings; always appear with the corresponding symbols	<i>You will find further information in ...</i>

Symbols

The following symbols used in the manual always appear with gray, italicized text:



This symbol indicates useful tips and supplementary information.



The exclamation point designates sections which contain important information.



Indicates especially important instructions that absolutely must be observed to ensure correct functioning.

1 Welcome to KEN!

Access to ISDN and Internet services has become increasingly important even for small companies. And such access entails making these communications services available from each and every workplace. ISDN plays a leading role in this development, carried by the strength of its convincing features: high speed, excellent quality and economy.

With KEN!, AVM offers you the opportunity to use all computers in your network easily and economically for connections to ISDN and the Internet.

1.1 What does KEN! offer?

KEN! is a powerful and easy-to-operate communications application for PC networks. Specialized knowledge about networks is required for neither installation nor operation of KEN!.

Along with an ISDN-Controller like a FRITZ!Card or AVM ISDN-Controller B1, KEN! combines all ISDN and Internet services on your computer and enables them for all workstations in the network.

The fundamental features of KEN! are presented below.

ISDN services at every workplace using 'CAPI Services'

KEN! grants all networked computers joint access to one ISDN-Controller. This joint access functions as if each computer had its own ISDN-Controller installed. As such, every user in the network can use ISDN and Internet services directly from the workstation.

The KEN! package includes one FRITZ! license for each computer in the network. FRITZ!, the well-known ISDN communications program by AVM, offers the following features:



With the ISDN file manager **FRITZ!data**, files can be transferred quickly and securely. The computer can also be set to receive files from other users. Access rights can be structured individually. Implementation of V.42bis data compression on both sides of the connection optimizes transmission speed.



With **FRITZ!fax**, faxes can be sent and received directly from text processing in accordance with the "Group 3 Fax" standard (analog fax), at a rate of 14,400 bit/s. Faxes can also be polled and FRITZ!fax configured as a fax polling server. Using the FRITZ!journal, faxes can be managed, printed, forwarded and much more.



FRITZ!fon, together with a full-duplex sound adapter and a voice input/output device, allows you to telephone through your computer—with convenient dialing, number management and note features. Three conversation partners can be connected jointly in a conference call.



FRITZ!vox turns your computer into a versatile answering machine. You can use different outgoing messages for specific numbers of your ISDN line, for specific callers and for specific times of day. It is also possible to switch calls between FRITZ!vox and FRITZ!fon, for instance, to pick up an incoming call from the answering machine.



In the FRITZ! **Address Book** entries required to establish connections with the various modules are stored. The Address Book can be opened from all FRITZ! modules.



The ISDN communications program FRITZ! is a single-workstation solution and therefore must be installed on each computer to be used with KEN! ISDN services. For comprehensive information about FRITZ!, see the Online Help and the FRITZ! manual.

Joint Use of One Internet Access

Internet access is especially simple for KEN! Users. Using a standard browser, KEN! takes care of access for all computers in the network, liberating the users from the tasks of establishing and clearing down connections.

KEN! facilitates the shared use of one Internet access, reducing costs in a number of ways:

- Two, three or more users can use one channel at the same time to surf the Internet. The other B channel remains free for such tasks as fax reception or incoming telephone calls.
- KEN! independently establishes and clears down the connection to your Internet provider as needed.
- Recalling Internet pages is fast and economical with KEN!, as KEN! saves recently visited Internet sites in a cache.
- All users in your network have access to the Internet with KEN!, with KEN! transmitting Internet data on behalf of all users.

The KEN! package includes the current browsers from Microsoft and Netscape.

Sending and Receiving E-mail

Every KEN! User can send and receive E-mail messages with common E-mail applications such as those from Microsoft and Netscape.

KEN! provides your network with a powerful E-mail server which sends E-mail from your network into the Internet, automatically picks up E-mail from your Internet provider, and distributes messages individually to each user addressed.

In addition to E-mail exchange with the Internet, the KEN! E-mail server also facilitates the exchange of internal E-mail. This means KEN! can be used to send and receive E-mail free of transmission charges within your network.

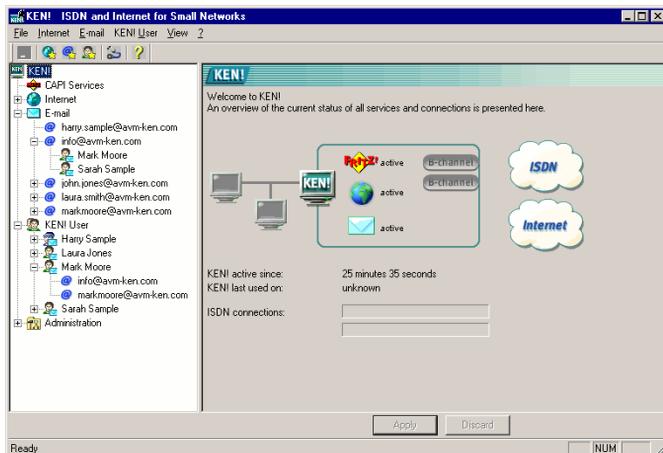
1.2 The KEN! Components

KEN! comprises two components: KEN! Service and KEN! Client.

KEN! Service

KEN! Service is installed on the computer in your network which has the ISDN adapter installed and is connected to ISDN. Installation turns this computer into the KEN! Service PC for your network. The KEN! Clients have access to ISDN and Internet services through this KEN! Service PC. The current KEN! activity is indicated by the KEN! icons in the status field of the task bar. The icons show both the status of the ISDN B channels and the condition of the Internet connection.

Settings for KEN! services are performed with the KEN! program on the KEN! Service PC. Here you can define such settings as the registration of new E-mail users and new E-mail addresses. The KEN! program displays detailed information about the current and previous use of KEN!. Special settings for ISDN and Internet connections also can be made here.

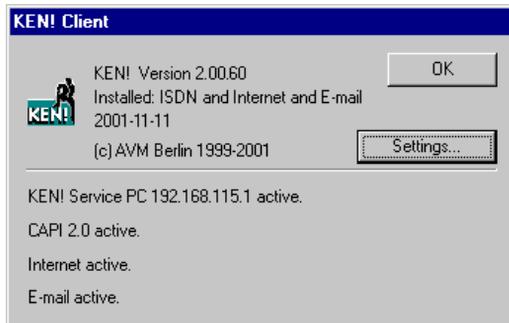


The KEN! Service program interface

KEN! Client

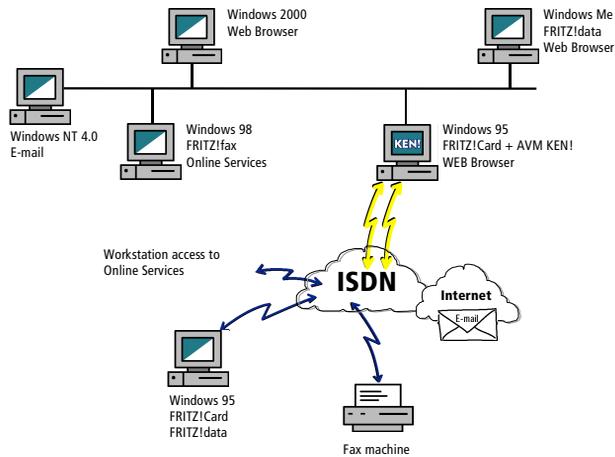
KEN! Client is installed on all other computers in your network, turning these computers into KEN! Clients. Because KEN! Client works in the background, it does not reduce the efficiency of your computer. The current KEN! activity is indicated by the KEN! icons in the status field of the task bar.

A status display reports the version installed and the services activated.



Status display on a KEN! Client

The following illustration offers an overview of the components and the implementation options of KEN!.



KEN! concept and possible implementations

1.3 Package Contents

The package delivered contains the following:

- 1 KEN! CD
 - The CD contains the installation files KEN! Service and KEN! Client along with the installation files for the ISDN communications program FRITZ!.
 - The CD also contains the installation files for the current browsers from Microsoft and Netscape along with their E-mail applications.
 - The folder KEN\ENGLISH\MANUAL contains the PDF file “Tips & Tricks”. This file offers useful hints to assist you in working with KEN! and presents answers to frequently asked questions which may be of assistance if problems arise.
- 1 “KEN!” manual

Should any of the above items not be included in the package, please contact your vendor.



On the back of the CD cover is the Product Identification Code. This serial number is a part of the license agreement with AVM. Keep this number and the original CD in a safe place.

1.4 System Requirements

The following hardware requirements must be met for KEN! operation:

KEN! Service

- an ISDN adapter

The ISDN adapter must be equipped with the application interface CAPI 2.0, like any AVM ISDN-Controller from the FRITZ!Card series or an AVM ISDN-Controller B1.
- An IBM or 100%-compatible computer with:
 - 1 network adapter to connect the KEN! Service PC with your network
 - CD-ROM drive
 - Pentium processor 166 MHz or higher
 - 32 MB RAM
 - Microsoft Windows Me, 98, 2000, NT 4.0 (workstation or server with current Service Pack), or Windows 95 operating system, including the relevant installation CD
 - 20 MB memory on the hard drive for installation and an additional 150 MB for temporary storage of E-mail and Internet pages

KEN! Client

- An IBM or 100%-compatible computer with:

network adapter, CD-ROM drive, Pentium processor, 16 MB RAM and Microsoft Windows Me, 98, Windows 2000, Windows NT 4.0 (workstation or server) or Windows 95 operating system including the installation CD



Before installing KEN! Service and KEN! Client, note the steps described below to prepare for installation.

1.5 Preparing for Installation

Before installing KEN!, it is necessary to check a few settings on the computers in your network and to change these where required. This section tells you how to prepare your network and your computers for KEN! installation.

Do you think of yourself as a network specialist? If so, see the chapter „KEN! for the Network Specialist“ auf Seite 91 for a compact description of the network functions.

Step 1: Network

The first prerequisite for installing and working with KEN! is a smoothly operating network. The exchange of information must be guaranteed free of interference. The following networks can be configured for operation with KEN!:

- a Windows 2000/NT 4.0 or Windows Me/98/95 network with peer-to-peer communication, i.e., without a Windows 2000 or Windows NT server
- a Microsoft network with a Windows 2000 or Windows NT 4.0 server
- a Novell network with a NetWare server

Step 2: Network Protocol

Computers in a network require for information exchange a common “language”, also known as a network protocol. The Internet network protocol, for instance, is called TCP/IP.

KEN! also uses TCP/IP for communication in your network. In order for KEN! to be able to use this protocol, it must be configured on all computers in the network. During KEN! installation the software checks whether TCP/IP is installed on the computer. If not, a Help file opens and assists you in installing TCP/IP.

The network operating system need not be based on the TCP/IP network protocol. Since several protocols can be used parallel to each other in a local network (e.g. NetBEUI, IPX/SPX or TCP/IP), there is no problem adding TCP/IP. Even the parallel use of TCP/IP by KEN! and other network applications is guaranteed at all times.

Step 3: ISDN Adapter

Before the installation of KEN! Service, at least one ISDN-Controller with the CAPI 2.0 applications interface must be installed on the KEN! Service PC. Check the installation of the ISDN-Controller on the computer that is to serve as the KEN! Service PC in your network. For more information, see the manual of your ISDN-Controller.

Step 4: Browser and E-mail Application

To surf in the Internet and to exchange E-mail with KEN!, a WWW browser and an E-mail application are required on every computer in your network. All popular browsers are suitable, including their integrated E-mail applications.

The PROGRAMS\BROWSER folder on the KEN! CD contains the current versions of the web browsers by Microsoft and Netscape. Both browsers and their associated E-mail applications work equally well with KEN!.

The Microsoft Internet Explorer 5 is partially configured for KEN! automatically during the KEN! installation. All other browsers require the user to make minor configuration settings after installation of KEN!.



This manual describes the necessary browser settings using the Internet Explorer as an example. To follow along with these instructions, we recommend installing the Internet Explorer 5.0 included in the package before installing KEN!. This browser is located on the KEN! CD in the folder PROGRAMS\BROWSER\MSIE.5\ENGLISH.

Step 5: Installing FRITZ!

Install the ISDN communications software FRITZ! on the KEN! Service PC and all KEN! Clients which are to use ISDN services via KEN!. Using the various FRITZ! modules you can transfer files, send and receive faxes, use the computer as an answering machine, make telephone calls, and much more.

The installation files for FRITZ! are included in the FRITZ! directory on the CD. See the FRITZ! manual for information about how to install FRITZ!.

2 Installing and Configuring KEN! Service

This chapter first describes the installation of KEN! Service and then explains how the KEN! Service PC must be configured to work with KEN!.



All installation steps described refer to installation in Windows Me unless otherwise specified. Minor variations may be necessary for other Windows operating systems.

All steps of installation and configuration are accompanied by function tests. These tests ensure at each step that the individual KEN! services and components are installed and configured correctly.

The chapter concludes with a section explaining how to uninstall KEN! Service.

2.1 Installing KEN! Service

Proceed as follows to install KEN! Service:

Step 1: Test the ISDN Adapter

Before installing KEN! Service, check that your ISDN adapter is functioning properly. Proceed as follows:

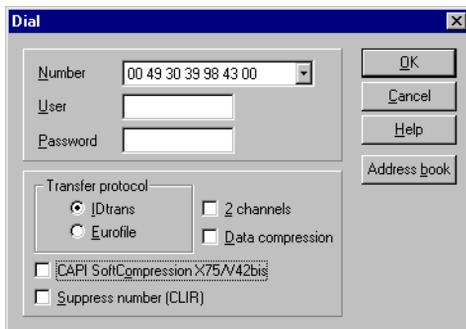
1. Start the FRITZ!data program using the menu commands “Start / Programs / FRITZ!”.
2. If the ISDN adapter in your KEN! Service PC is connected to a PBX, check the “PBX” dialog page in “File / Settings” to determine whether it is configured for outside line access.
3. Then click the “Dial” button in the tool bar. A window appears in which information may be entered for remote connections.

4. Enter the number for the AVM Data Call Center (ADC) in Berlin:

0 30 / 39 98 43 00

Remember to adjust the international dialing prefix as required.

+49 (0)30 / 39 98 43 00



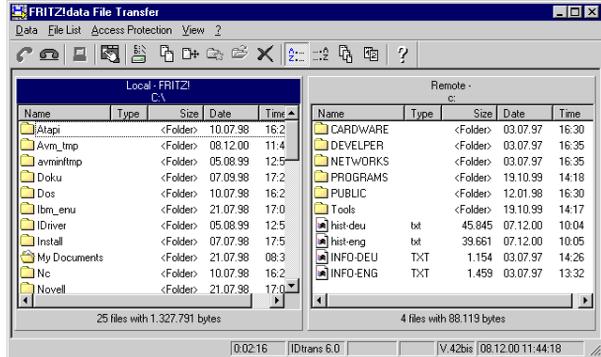
“Dial” window in FRITZ!data

5. Select the other options and settings as displayed in the above illustration.
6. Click the “OK” button to begin dialing.



If a connection is not established immediately, try again. The ADC may be busy at peak times.

Once the connection is established, the files and folders of the ADC will be displayed in the right-hand window.



The FRITZ!data window after establishing a connection

7. Clear down the connection to the ADC with the function key “F3”.



If you were not able to connect to the ADC, check that your ISDN adapter is installed and functioning properly.

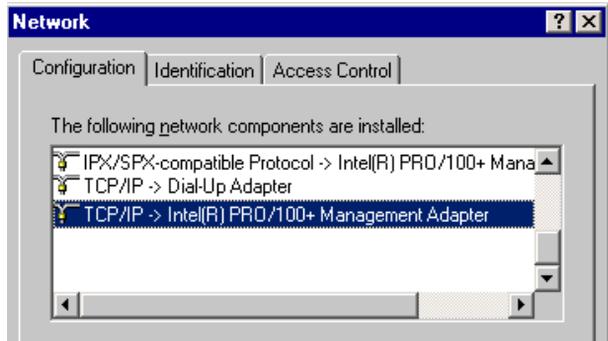
Step 2: Check the Network Adapter

Determine whether the TCP/IP protocol is bound to the network adapter. Also check whether an IP address is specified for this network adapter. Proceed as follows:

Windows Me, 98 and 95

1. Click through “Start / Settings / Control Panel / Network” to open the Windows network settings.
2. Look for the “TCP/IP” entry in the list of installed network components.

If there are multiple entries for TCP/IP, look for the entry “TCP/IP-> <name of the network adapter>”.



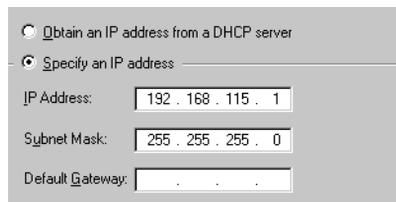
Binding the TCP/IP protocol to the network adapter in Windows Me. These settings may look different on your computer.

3. If no entry is listed for TCP/IP, add the protocol using the command “Add... / Protocol / Microsoft / TCP/IP”.
4. Click “Properties...” and specify an IP address for the network adapter.



In the entire KEN! manual the IP address 192.168.115.1 is used as the specified IP address. We recommend assigning this IP address for the KEN! Service PC as long as there is no conflict with existing settings.

5. Make note of the specified IP address.

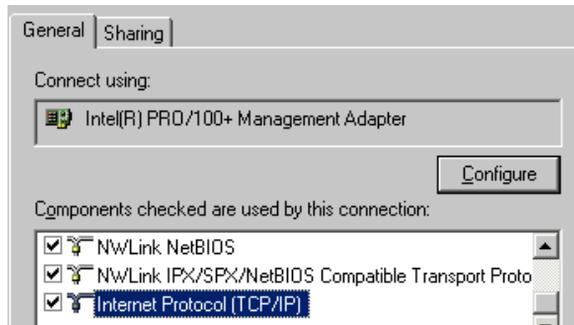


Example for the IP address 192.168.115.1 of the KEN! Service PC. These settings may look different on your computer.

6. If you made any changes to these settings, apply them and save your entries. Keep your Windows CD ready and restart Windows.

Windows 2000

1. Click through “Start / Settings / Network and Dial-up Connections” to open the Windows network settings.
2. Select the “LAN connection” entry, open the context menu and select “Properties”.
3. Look for the “Internet Protocol (TCP/IP)” entry in the list of installed network components.

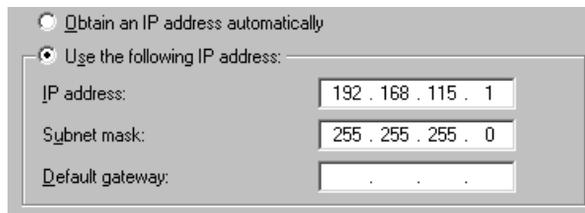


TCP/IP protocol binding to a network adapter in Windows 2000. These settings may look different on your computer.

4. Click “Properties...” and specify an IP address for the network adapter.



In the entire KEN! manual the IP address 192.168.115.1 is used as the specified IP address. We recommend assigning this IP address for the KEN! Service PC as long as there is no conflict with existing settings.



Example for the IP address 192.168.115.1 of the KEN! Service PC. These settings may look different on your computer.

5. Make note of the specified IP address.

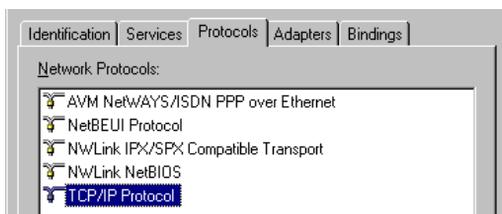
6. If you made any changes to these settings, apply them and save your entries. Keep your Windows CD ready and restart Windows.

Windows NT



For a KEN! Service installation on a Windows NT 4.0 computer, it is imperative that the current Microsoft Service Pack be installed on this computer first. Moreover, the Service Pack must be reinstalled after every change which required inserting the Windows NT CD. This is the only way to ensure that the current Service Pack files are always installed on your computer.

1. Click through “Start / Settings / Control Panel / Network” to open the Windows network settings.
2. Select the “TCP/IP Protocol” entry on the “Protocols” settings page.



The TCP/IP protocol in Windows NT. These settings may look different on your computer.

3. If the entry is not listed, add the binding by clicking “Add... / Protocol / Microsoft / TCP/IP Protocol”.
4. Click “Properties...” and specify an IP address for the network adapter.



In the entire KEN! manual the IP address 192.168.115.1 is used as the specified IP address. We recommend assigning this IP address for the KEN! Service PC as long as there is no conflict with existing settings.

IP Address | DNS | WINS Address | Routing

An IP address can be automatically assigned to this network card by a DHCP server. If your network does not have a DHCP server, ask your network administrator for an address, and then type it in the space below.

Adapter:
[1] Cogent eMASTER+ PCI Adapter

Obtain an IP address from a DHCP server
 Specify an IP address

IP Address: 192 . 168 . 115 . 1
Subnet Mask: 255 . 255 . 255 . 0
Default Gateway: . . .

Example for the IP address 192.168.115.1 of the KEN! Service PC. These settings may look different on your computer.

5. Make note of the specified IP address.
6. If you made any changes to these settings, apply them and save your entries. Keep your Windows CD ready and restart Windows.

Step 3: Start KEN! Service Installation

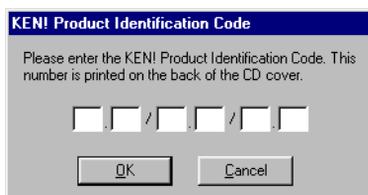
Proceed as follows to install KEN! Service:

1. Insert the KEN! CD in your CD-ROM drive. A CD introduction is started automatically.

The CD introduction also can be started manually by double-clicking on the INTRO.HLP file in the root directory of the CD.

2. Click “Readme” on the Welcome page. The “Readme” file contains information which was not yet available when this manual was printed.
3. Start the KEN! Service installation by clicking the line “KEN! Service”.
4. The Welcome window appears. Click “Next”.

5. In the following window you are prompted to enter the Product Identification Code. The code is printed on the back of the CD cover. Confirm your entry with “OK” and then confirm the installation of KEN! by clicking “OK” again.



Window for entering the Product Identification Code

6. In the following screen, specify the path in which KEN! is to be installed. The path C:\PROGRAM FILES\KEN! is suggested by default. Confirm the installation path by clicking “Next”.
7. Confirm the information in the next window as well by clicking “Next”. The program files of KEN! Service are copied to the specified folder.
8. Comply with the request to restart your computer.

Once the computer is restarted, the KEN! Service installation is concluded.

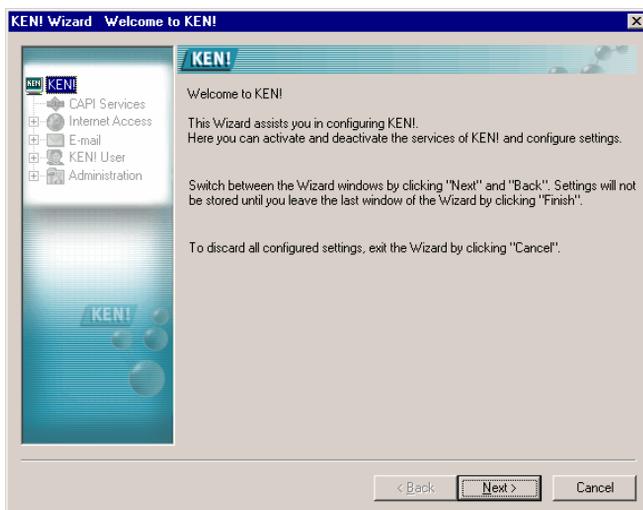


After installation, the Windows Start folder contains the new folder “AVM KEN!” in the “Programs” group . This folder contains the KEN! program and the current Readme along with the KEN! manual and the “Tips & Tricks” manual in PDF format.

The KEN! program opens the KEN! user interface. The Readme file contains current information about KEN!.

Step 4: Configure KEN! Service with the Wizard

When the KEN! Service PC is restarted after installation, the KEN! Wizard starts automatically. This program assists you in configuring KEN! for your network. The first window of the KEN! Wizard is the welcome window.



The welcome window of the KEN! Wizard

1. Click the “Next” button in the KEN! Wizard welcome window.
2. In the next window, specify whether the service “CAP! Services” is to be used. This service provides all KEN! Clients with access to ISDN services like fax and file transfer. Confirm your entries by clicking “Next”.
3. To use KEN! for access to the Internet, accept the preset option “Activate Internet Access” in the next window.
4. If the ISDN adapter in the KEN! Service PC is connected to a PBX, activate the “Operation PBX” option and enter the outside dialing access (usually “o”).
5. Then select your provider from the list of Internet providers. If your provider is not included in the list, select “Add new Internet provider”. Click “Next”.

Step 4: Configure KEN! Service with the Wizard

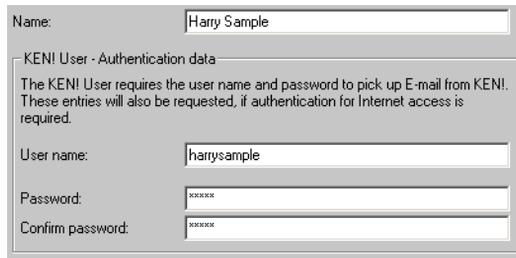
Enter the Internet access parameters supplied by your Internet provider. Click “Next”.



A screenshot of a configuration window for an Internet provider. It contains five input fields: "Name of Internet provider:" with the value "My provider", "Number:" with "987654321", "User name:" with "MyName", "Password:" with "xxxxxx", and "Confirm password:" with "xxxxxx".

Example: Access data for an Internet provider

6. For E-mail exchange using KEN!, accept the preset option “Activate E-mail” in the next window.
7. In the next window, enter the first user.



A screenshot of a window titled "KEN! User - Authentication data". It contains a "Name:" field with "Harry Sample". Below it is a text box explaining that the KEN! User requires a user name and password. There are three input fields: "User name:" with "harrysample", "Password:" with "xxxxxx", and "Confirm password:" with "xxxxxx".

Example: User data entry

Enter the name of the user here. When you click in the “User name” field, a user name is proposed automatically. Accept the suggested name or change it as desired. Assign a password for the new user and enter the password again to confirm it. Click “Next”.

8. In the following window an E-mail address is suggested for the new user. Accept the suggested address or change it as desired.



A screenshot of a window for entering an E-mail address. It contains the text "Enter the new E-mail address of the new user here." and "Your provider supplied the E-mail address." followed by "Examples:" and three examples: "my_company@web.com", "H.Sample@company.nl", and "Harry Sample" <my-company@gmx.com>. There is an "E-mail address:" field with "harrysample@my-company.com" and a checkbox labeled "Only use this E-mail address within the local network." which is unchecked.

Example: E-mail address

- If the user already has an E-mail address at an E-mail provider, enter it here. Click “Next”.
 - If this user is only allowed to send E-mail within the KEN! network, activate the option “Only use this E-mail address within the local network.” Click “Next” and continue from step 11.
9. In the next window, enter the E-mail provider's parameters for sending and receiving E-mail. These data are supplied by your provider.

SMTP server:	<input type="text" value="uumail.de.uu.net"/>
POP3 server:	<input type="text" value="uumail.de.uu.net"/>
POP3 account name:	<input type="text" value="654987"/>
Password:	<input type="password" value="xxxxxx"/>
Confirm password:	<input type="password" value="xxxxxx"/>

Example: Entries for the SMTP server, POP3 server, POP3 account name and password of a user

10. In the next window, accept or change the settings for the weekly budget. When the ISDN charges or connection times exceed the weekly budget for Internet and ISDN connections, KEN! will not allow any further ISDN communication. Existing connections will be cleared down.

Click “Next”.



The weekly budget for connection charges can be used only if the transmission of charge information is enabled by your network operator.

11. The next window presents an overview of which of the three KEN! services have been activated and deactivated.

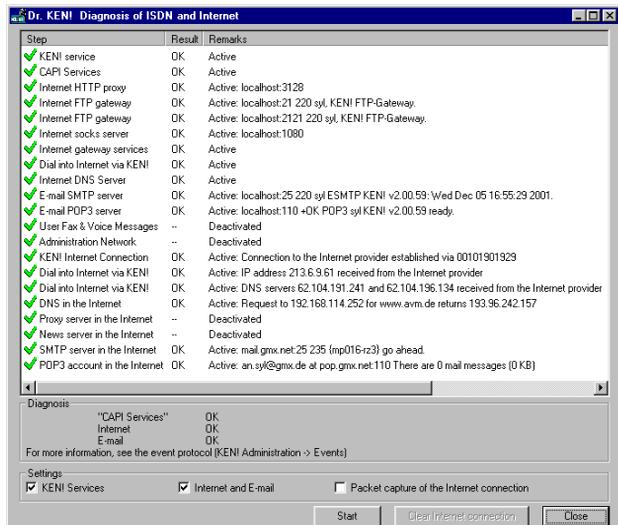
Here you have the opportunity to check the settings you just made using the Dr. KEN! diagnosis program.

If you do not wish to check the configuration, deactivate the option “Dr. KEN! checks all settings configured upon leaving the Wizard”.

Step 4: Configure KEN! Service with the Wizard

12. Close the KEN! Wizard by clicking “Finish”.
13. If you have opted to check your configuration, the Dr. KEN! diagnosis window opens to perform a diagnosis.
14. Select which services Dr. KEN! should check and click the “Start” button.

Dr. KEN! connects to the Internet and checks that the servers in the Internet can be reached, independent of your browser or E-mail application. The services checked and the results of the tests are listed in the window. A brief diagnosis is presented in the bottom section of the Dr. KEN! window.



The Dr. KEN! Diagnosis window



Comprehensive information about the Internet and ISDN services is presented in the KEN! interface in the “Administration / Events” area.

15. Exit Dr. KEN! by clicking “Close”.

2.2 Configuring the Browser and the E-mail Application

This section describes which settings must be made to your browser and your E-mail application on the KEN! Service PC before all Internet and E-mail services can be used with KEN!.

Step 1: Settings in the Browser

In order to use Internet services with KEN! it is necessary to activate the use of a proxy server in the browser and to enter the port and address of the proxy server.

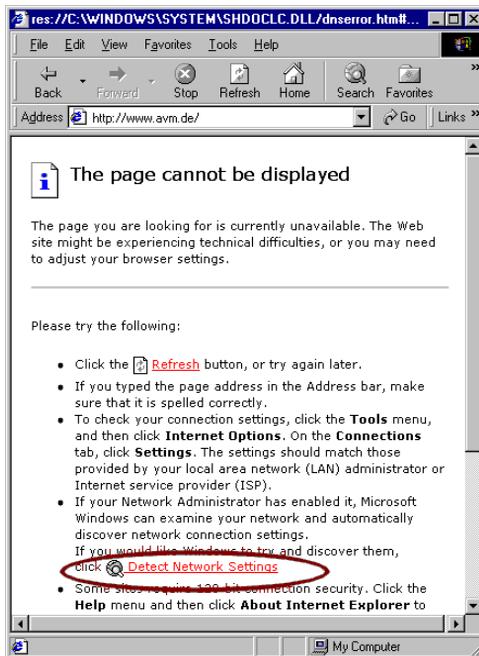
Internet Explorer 5

If you work with Internet Explorer 5, KEN! will configure these settings automatically.

The following section describes how to start the automatic configuration and how to check the settings after configuration.

1. Start Internet Explorer 5.
2. In the “Address” field, enter any Internet page, e.g. **www.avm.de**. If the Internet page is displayed, no further configuration is necessary.
3. If the following page appears instead of the desired Internet site, click on the selected entry “Detect Network Settings”.

Step 1: Settings in the Browser



Information window after calling up the first Internet page

This prompts KEN! to automatically adapt the Internet Explorer.

4. After automatic adaptation, the Internet page you requested appears, for instance, the AVM home page.



Active Internet connection to the AVM home page.



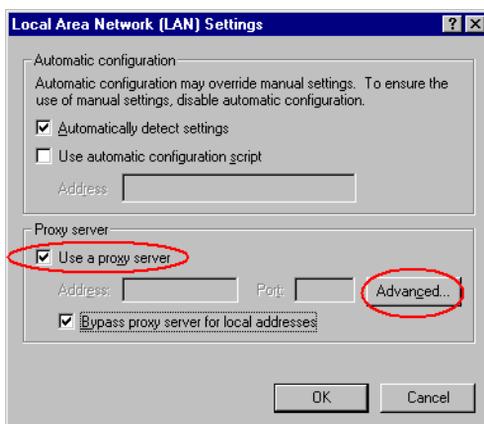
The KEN! icon in the status area of the task bar indicates an active connection with one B channel and an active Internet connection. One LED of the KEN! icon glows green and the globe appears in color.

This concludes the configuration test.

5. If the specified Internet page is not displayed, check the settings again and make any necessary changes.

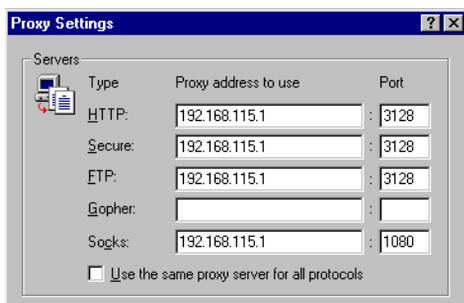
Select the menu commands “Tools / Internet Options...” and then click on the “Connections” page. On this page click the “LAN Settings...” button.

6. Activate the option “Use a proxy server” in the “Local Area Network (LAN) Settings” window and then click the “Advanced...” button.



“Local Area Network (LAN) Settings” window

7. Make sure that the following values are entered for the proxy server:



Proxy settings with the example 192.168.115.1

The IP address of the KEN! Service PC must be entered as the address of the proxy server (see „Step 2: Check the Network Adapter“ auf Seite 19; the IP address 192.168.115.1 is listed as an example there).

8. Leave the Internet Options window by clicking “OK” until all windows are closed and return to the address entry field in the browser.
9. Enter the address of an Internet page again; now the specified page appears.
10. Close the browser. This concludes the configuration.



If you were unable to establish a connection to the AVM home page, check whether all installation requirements have been met. For further trouble-shooting, start the Dr. KEN! diagnosis program by clicking “Administration / Diagnosis”.

Other Browsers

In order to use Internet services with KEN! it is necessary to activate the use of a proxy server in the browser and to enter the port and address of the proxy server.

Enter the following values for the service types “HTTP”, “Secure”, “FTP” and “Socks”. The IP address of the KEN! Service PC must be entered as the address of the proxy server (see „Step 2: Check the Network Adapter“ auf Seite 19; the IP address 192.168.115.1 is listed as an example there).

Service type	Address of the proxy server (example)	Port
HTTP	192.168.115.1	3128
Secure	192.168.115.1	3128
FTP	192.168.115.1	3128
Socks	192.168.115.1	1080

Step 2: Settings in the E-mail Application

If you already added a KEN! User during the installation of KEN! Service with the Wizard, this user must now be activated in your E-mail application. Read the sections below.

Outlook Express 5

If you are working with Outlook Express 5, these settings can be configured automatically with KEN!.

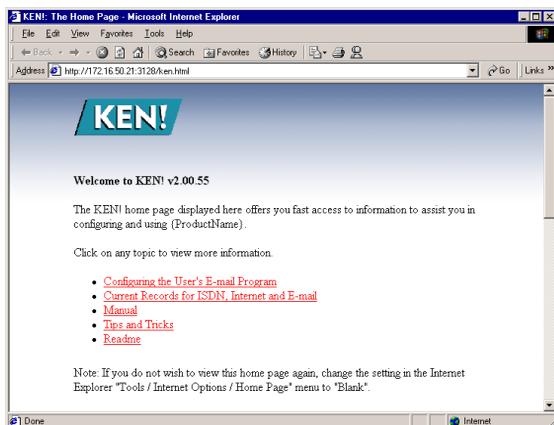
The following section describes how to start the automatic configuration and how to check the settings after configuration.

1. Open the KEN! home page by clicking “Start / Programs / AVM KEN! / KEN! Home Page”.

From this page the automatic configuration of the E-mail application Microsoft Outlook Express is started.



The Internet Explorer 5 home page was changed by the KEN! Service installation. After configuring the E-mail user, the home page can be changed again as desired.



KEN! home page

2. Click "Configuring the User's E-mail Program". The following window presents a table in which the users you have created are registered with the E-mail addresses they have been assigned.

3. Click on this entry in the “Automatic configuration of Outlook Express” column. The following window appears:



“File Download” window in the Internet Explorer

4. Activate the option “Open this file from its current location”.
5. Confirm the message “Warning: you are about to change your Internet settings.” by clicking “OK”.



Security warning while creating a new user

In Windows 2000 and Internet Explorer 5.5, the next dialog prompts you to select a modem for Internet access. Select “Cancel” and confirm the next two error messages.

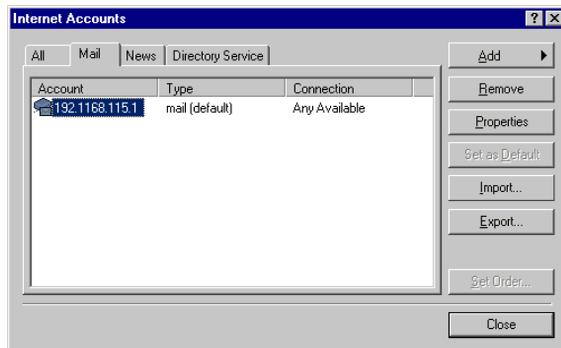
6. Now open the E-mail application Outlook Express.

- The following window “Logon - <Name of the E-mail account>” appears.



Registration of the user at the KEN! Service PC

- In the “Password” field, enter the password you have assigned for this user in KEN!.
- Configuration in Outlook Express was successful if you find the welcome mail from KEN! in the inbox. Continue reading from „Adding a New User at a KEN! Client“ auf Seite 39.
- If you did not receive a welcome mail, select the menu “Tools / Accounts...”. Switch to the “E-mail” settings page. The following window appears:

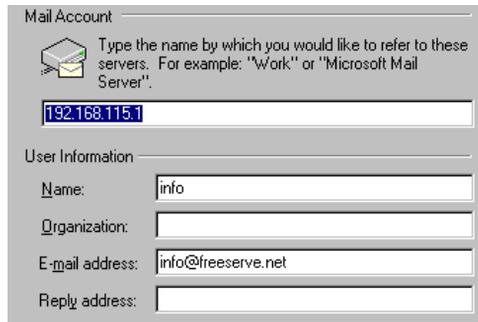


“Internet Accounts” in Outlook Express with the example 192.168.115.1

- In this window, activate the account with the static IP address and click the “Properties” button.

12. Check the E-mail address entered on the “General” page.

Instead of the IP address, you can assign the account any name desired.



Mail Account

Type the name by which you would like to refer to these servers. For example: "Work" or "Microsoft Mail Server".

192.168.115.1

User Information

Name: info

Organization:

E-mail address: info@freeserve.net

Reply address:

“General” page in the properties of an account

13. On the “Servers” page, check the entries for the POP3 and SMTP servers. The fields “Incoming mail (POP3)” and “Outgoing mail (SMTP)” must contain the static IP address of the KEN! Service PC (see „Step 2: Check the Network Adapter“ auf Seite 19; the IP address 192.168.115.1 was used as an example).



General Servers Connection Security Advanced

Server Information

My incoming mail server is a POP3 server.

Incoming mail (POP3): 192.168.115.1

Outgoing mail (SMTP): 192.168.115.1

Incoming Mail Server

Account name: harysample

Password: [masked]

Remember password

Log on using Secure Password Authentication

Outgoing Mail Server

My server requires authentication

Settings...

“Servers” page in the properties of an account

In the “Name” field the user name from KEN! was entered by the automatic configuration routine.

14. Enter the password for this user in the “Password” field. For reasons of security the password was not transmitted automatically to the E-mail application.
15. Check the “Connection” page to make sure that the option “Always connect to this account using: Local Area Network” is selected.



“Connection” page in the properties of an account

16. Implement your entries by clicking “OK” and then “Close”.

Other E-mail applications

Proceed as follows to activate the newly created user in your E-mail application:

1. Open the KEN! home page by clicking “Start / Programs / AVM KEN! / KEN! Home Page”.
2. Click “Configure the User’s E-mail Program”. The following window presents a table in which the KEN! Users you have created are registered with the E-mail addresses they have been assigned.
3. Click on this entry in the “Other E-mail programs” column. In the next window, select the E-mail program for which you would like to configure the user.
4. The table that appears contains the data which you must enter for the user in the E-mail application.

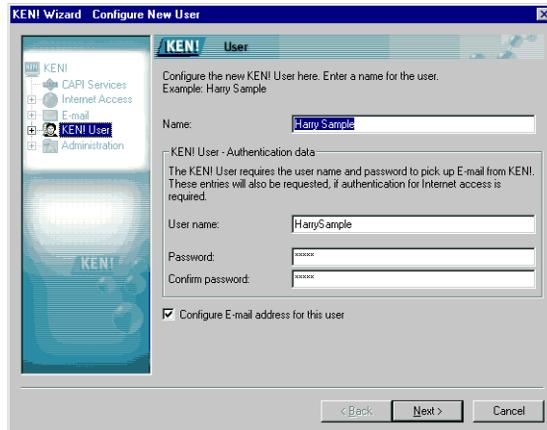
2.3 Adding a New User at a KEN! Client

All KEN! Users in your network that are to send and receive E-mail must be added on the KEN! Service PC and assigned an E-mail address. After each user is added, an E-mail application must be configured at the KEN! workplace he or she uses (see the section „Step 2: Settings in the E-mail Application“ auf Seite 57).

The following describes how to add a new E-mail user to KEN! with the KEN! Wizard.

Step 1: Adding a User in the KEN! Program

1. Open the KEN! user interface on the KEN! Service PC by clicking “Start / Programs / AVM KEN!”.
2. In the “KEN! User” menu, select the “Add User” command. The KEN! Wizard opens.
3. Enter the user data in the next dialog.



The KEN! Wizard for adding a new user

4. In the next window, select an E-mail address for the user or configure a new address for this user. If you select an existing E-mail address, click “Finish”. To create a new E-mail address, select “Next”.

5. Enter the E-mail address in the next window. KEN! suggests an address; accept this suggestion or overwrite it.
6. If this user is only allowed to send E-mail within the KEN! network, activate the option “Only use this E-mail address within the local network”.

Otherwise enter the access parameters for your E-mail provider's SMTP and POP3 servers in the next window.
7. Confirm your entries by clicking “Next”. The Wizard is closed.
8. Click “Apply” to save the new E-mail address.

Step 2: Configure the User in the E-mail Application of the KEN! Client

In the next step, all of the newly added users must be configured in the E-mail application on the KEN! Clients. For more information, see „Step 2: Settings in the E-mail Application“ auf Seite 57.

2.4 Removing KEN! Service

Before removing KEN! Service, it is important to save all mail temporarily on hard disk of the KEN! Service PC so that no E-mail messages are lost through uninstallation.

Step 1: Save all E-mail Stored Temporarily

Check the E-mail service of the KEN! program to make sure that no more E-mail messages are in the KEN! Service PC's temporary memory.

1. If E-mail for the Internet is stored temporarily, initiate E-mail exchange.
2. If E-mail for the users are located on the hard disk, ask all KEN! Users to pick up their E-mail from the KEN! Service PC.

Step 2: Removing KEN! Service



You must exit KEN! before uninstallation.

Proceed as follows to remove KEN! Service:

1. Close the KEN! program interface and end KEN! by clicking with the right mouse button on the KEN! icon in the status area of the task bar.
2. Click the “Add/Remove Programs” icon in the Control Panel (“Start / Settings”).
3. On the “Install/Uninstall” page, select the list entry “AVM KEN!” and then click the “Add/Remove...” button.
4. Confirm that KEN! is to be removed by clicking “Yes” in the next window.
5. End uninstallation by clicking “OK”.
6. Reboot your computer.

Rebooting the computer concludes the uninstallation of KEN!.



Removing KEN! Service does not restore the original settings of your browser and your E-mail application. Any necessary changes, for instance, proxy settings, must be made manually.

3 Installing and Configuring KEN! Client

This chapter first describes the installation of KEN! Client, and then explains which settings must be made on the KEN! Client to work with KEN!.



All installation steps described refer to installation in Windows Me unless otherwise specified. Minor variations may be necessary for other Windows operating systems.

All steps of installation and configuration are accompanied by function tests. These tests ensure at each step that the individual KEN! services and components are installed and configured correctly.

The chapter concludes with a section explaining how to remove KEN! Client.

3.1 Installing KEN! Client

Proceed as follows to install KEN! Client:

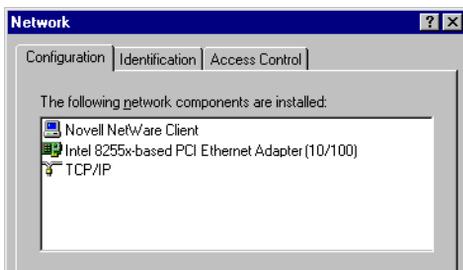
Step 1: Check the Network Adapter

Determine whether the TCP/IP protocol is bound to the network adapter on the KEN! Client and how the IP address is assigned. Proceed as follows:

Windows Me, 98 and 95

1. Click through “Start / Settings / Control Panel / Network” to open the Windows network settings.
2. Look for the “TCP/IP” entry in the list of installed network components. If the TCP/IP protocol is not available on the computer, add the protocol using the commands “Add... / Protocol / Microsoft / TCP/IP”.

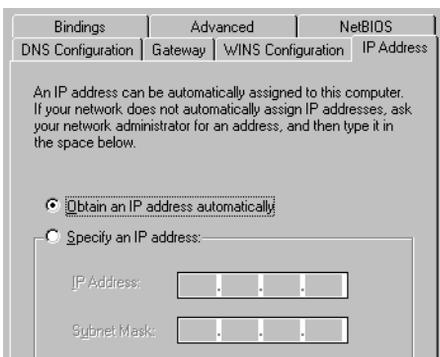
Step 1: Check the Network Adapter



TCP/IP network protocol

3. Select the “TCP/IP” entry and click “Properties”. The “IP Address” settings page indicates how the IP address is assigned.

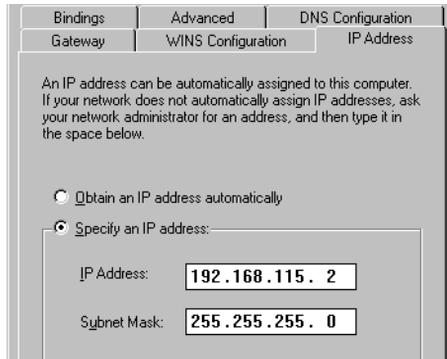
We recommend obtaining an automatically assigned IP address from the KEN! Service PC.



Obtaining an IP address automatically

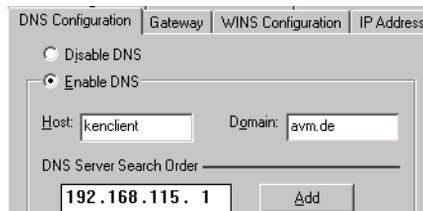
Click “OK” to obtain an IP address automatically. This concludes the configuration test. Continue reading from „Step 2: Start KEN! Client Installation“ auf Seite 49.

4. It is also possible to assign KEN! Clients static IP addresses. In this case, check the following settings:
 - These IP addresses may not conflict with the settings on the KEN! Service PC (see „Step 2: Check the Network Adapter“ auf Seite 19; the IP address 192.168.115.1 was named as an example there. The example allows the static IP addresses 192.168.115.2 through 192.168.115.254).



Example of a static IP address for TCP/IP

- Make sure that the option “Enable DNS” is selected on the “DNS Configuration” dialog page.

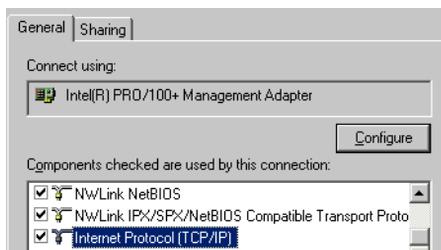


“Enable DNS” in the properties of TCP/IP

- In the field “DNS Server Search Order”, enter the IP address of the KEN! Service PC, click “Add” and confirm by clicking “OK”.
5. Apply and save your entries. Keep your Windows CD ready and restart Windows.

Windows 2000

1. Click through “Start / Settings / Control Panel / Network and Dial-up Networking” to open the Windows network settings.
2. Select the “LAN connection” entry, open the context menu and select “Properties”.
3. Look for the “Internet Protocol (TCP/IP)” entry in the list of installed network components and click “Properties”.



TCP/IP protocol binding to a network adapter in Windows 2000. These settings may look different on your computer.

We recommend obtaining an automatically assigned IP address from the KEN! Service PC. Click “OK” to select this option. This concludes the configuration test. Continue reading from „Step 2: Start KEN! Client Installation“ auf Seite 49.

4. It is also possible to assign KEN! Clients static IP addresses. In this case, check the following settings:
 - These IP addresses may not conflict with the settings on the KEN! Service PC (see „Step 2: Check the Network Adapter“ auf Seite 19; the IP address 192.168.115.1 was named as an example there. The example allows the static IP addresses 192.168.115.2 through 192.168.115.254).

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

Obtain an IP address automatically

Use the following IP address:

IP address: 192 . 168 . 115 . 2

Subnet mask: 255 . 255 . 255 . 0

Default gateway: . . .

Obtain DNS server address automatically

Use the following DNS server addresses:

Preferred DNS server: 192 . 168 . 115 . 1

Alternate DNS server: . . .

Example of a static IP address for TCP/IP

- In the “Preferred DNS server” field, enter the IP address of the KEN! Service PC and confirm with “OK”.
5. Apply and save your entries. Keep your Windows CD ready and restart Windows.

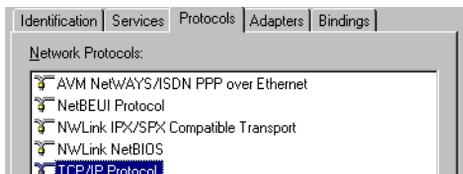
Windows NT



For a KEN! Service installation on a Windows NT computer, it is imperative that the current Microsoft Service Pack be installed on this computer first. Moreover, the Service Pack must be reinstalled after every change which required inserting the Windows NT CD. This is the only way to ensure that the current Service Pack files are always installed on your computer.

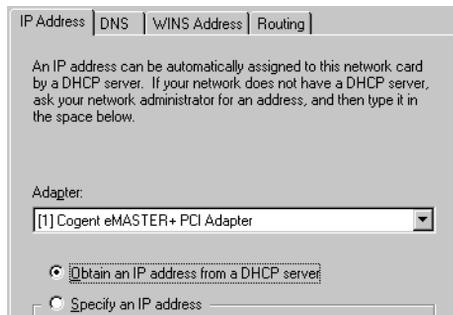
1. Click through “Start / Settings / Control Panel / Network” to open the Windows network settings.
2. Select the “TCP/IP Protocol” entry on the “Protocols” settings page. If the entry is not listed, add the binding by clicking “Add... / Protocol / Microsoft / TCP/IP”.

Step 1: Check the Network Adapter



The TCP/IP protocol in Windows NT. These settings may look different on your computer.

3. Select the “TCP/IP” entry and click “Properties...”.
4. We recommend obtaining an automatically assigned IP address from the KEN! Service PC. Click “OK” to select this option. This concludes the configuration test. Continue reading from „Step 2: Start KEN! Client Installation“ auf Seite 49.



Automatic assignment of IP addresses

- It is also possible to assign KEN! Clients static IP addresses. In this case, check the following settings:

The screenshot shows the 'IP Address' tab of a network configuration window. At the top, there are tabs for 'IP Address', 'DNS', 'WINS Address', and 'Routing'. Below the tabs is a text box explaining that an IP address can be assigned automatically by a DHCP server or manually. The 'Adapter:' dropdown menu is set to '[1] Cogent eMASTER+ PCI Adapter'. There are two radio buttons: 'Obtain an IP address from a DHCP server' (unselected) and 'Specify an IP address' (selected). Below the selected radio button are three input fields: 'IP Address:' with the value '192 . 168 . 115 . 2', 'Subnet Mask:' with the value '255 . 255 . 255 . 0', and 'Default Gateway:' which is empty.

Example of a static IP address for TCP/IP

- These IP addresses may not conflict with the settings on the KEN! Service PC (see „Step 2: Check the Network Adapter“ auf Seite 19; the IP address 192.168.115.1 was named as an example there. The example allows the static IP addresses 192.168.115.2 through 192.168.115.254).
 - On the “DNS” settings page, use the “Add...” button to enter the IP address for the DNS server of the KEN! Service PC.
- Apply and save your entries. Keep your Windows CD ready and restart Windows.

Step 2: Start KEN! Client Installation

Three versions of the installation program are available for KEN! Clients:

- ISDN, Internet and E-mail over KEN!
- ISDN over KEN!
- Internet and E-mail over KEN!

With the version “ISDN, Internet and E-mail” the KEN! Client has access to both ISDN and Internet services. The “ISDN” version allows KEN! Clients to use ISDN services only. With the version “Internet and E-mail” the KEN! Client has access to only Internet and E-mail services.



We recommend installing the “ISDN, Internet and E-mail” version. Any of these services may be subsequently deactivated on the KEN! Service PC if desired.

To install KEN! Client, proceed as follows:

1. Insert the KEN! CD in your CD-ROM drive. A CD introduction is started automatically.

The CD introduction also can be started manually by double-clicking on the INTROE.HLP file in the root directory of the CD.

2. The welcome window appears. Start the KEN! Client installation by clicking the line “KEN! Client”.
3. In the next window, select which KEN! Client version should be installed. Select among “ISDN, Internet and E-Mail over KEN!”, “ISDN over KEN!” or “Internet and E-Mail over KEN!”.
4. In the next screen, enter the path in which KEN! Client is to be installed. The path C:\PROGRAM FILES\KEN! is suggested by default, but any other path may be specified. Confirm the installation path by clicking “OK”. The KEN! Client program files are installed.
5. Reboot your computer to conclude the installation

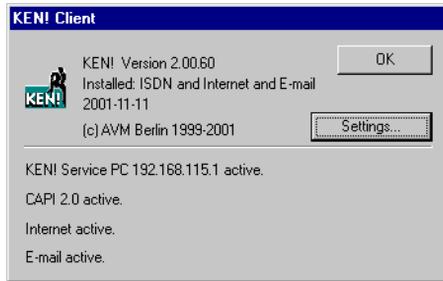
Once the computer has been rebooted, the KEN! Client installation is complete.

When the computer is rebooted, KEN! Client is started automatically. The KEN! icons are located in the status area of the task bar. They indicate that KEN! Client is ready for operation.



Information about the exact status of KEN! can be obtained by clicking the icon and selecting the menu command “Open KEN! Client”. The “KEN! Client” window appears.

The upper section of the window displays information about which KEN! Client version you selected. The lower section of the window reports whether the KEN! Service PC is switched on and which services are activated.



Status window on the KEN! Client

3.2 Testing 'CAPI Services'

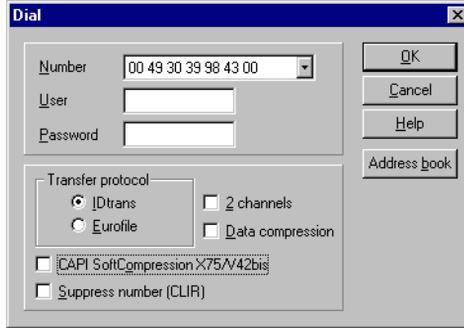
If the version "ISDN and Internet" or "ISDN" is installed on the KEN! Client, the next step is to check the installation of "CAPI Services". The following describes how to establish an ISDN connection to the AVM Data Call Center (ADC).

1. Start the FRITZ!data program using the menu commands "Start / Programs / FRITZ!".
2. If the ISDN adapter in your KEN! Service PC is connected to a PBX, check the "PBX" dialog page in "File / Settings" to determine whether it is configured for outside line access.
3. Then click the "Dial" button in the tool bar. A window appears in which information may be entered for remote connections.
4. Enter the number for the AVM Data Call Center (ADC) in Berlin:

030 / 39 98 43 00

Remember to adjust the international dialing prefix as required.

+49 (0)30 / 39 98 43 00



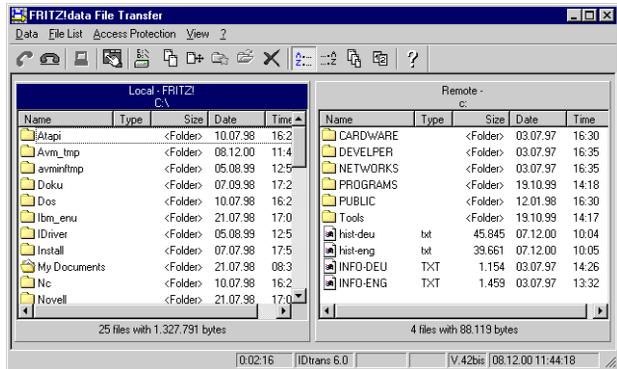
"Dial" window in FRITZ!data

5. Select the other options and settings as displayed in the above illustration.
6. Click the "OK" button to begin dialing.



If a connection is not established immediately, try again. The ADC may be busy at peak times.

Once the connection is established, the files and folders of the ADC will be displayed in the right-hand window.



The FRITZ!data window after establishing a connection



7. Note that the KEN! icon in the task bar shows an active channel. One LED of the KEN! icon glows green.
8. Clear down the connection to the ADC with the function key "F3". Note that the KEN! icon in the task bar no longer shows an active channel.



If you were unable to establish a connection to the AVM Data Call Center, check whether all installation requirements have been met. Test the ISDN-Controller on the KEN! Service PC. See also the “Tips & Tricks” from the KEN! program group.

3.3 Configuring the Browser and the E-mail Application on the KEN! Client

This section describes which settings must be made to your browser and your E-mail application before all Internet and E-mail services can be used with KEN!.

Step 1: Settings in the Browser

In order to use Internet services with KEN! it is necessary to activate the use of a proxy server in the browser and to enter the port and address of the proxy server.

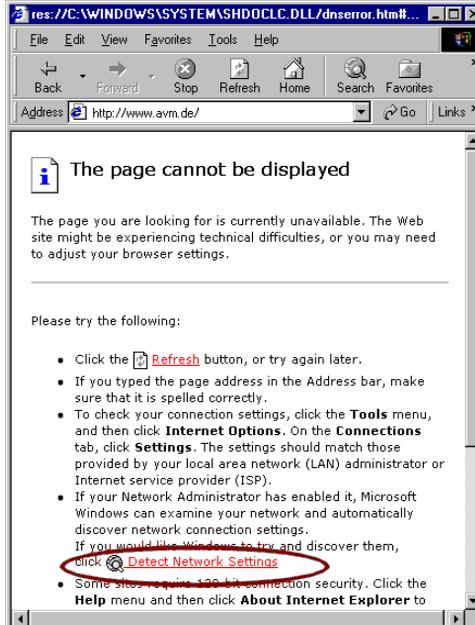
Internet Explorer 5

If you work with Internet Explorer 5, KEN! will configure these settings automatically.

The following section describes how to start the automatic configuration and how to check the settings after configuration.

1. Start Internet Explorer 5.
2. In the “Address” field, enter any Internet page, e.g. **www.avm.de**. If the Internet page is displayed, no further configuration is necessary.
3. If the following page appears instead of the desired Internet site, click on the selected entry “Detect Network Settings”.

Step 1: Settings in the Browser



Information window after calling up the first Internet page

This prompts KEN! to automatically adapt the Internet Explorer.

4. After automatic adaptation, the Internet page you requested appears, for instance, the AVM home page.



Active Internet connection to the AVM home page.



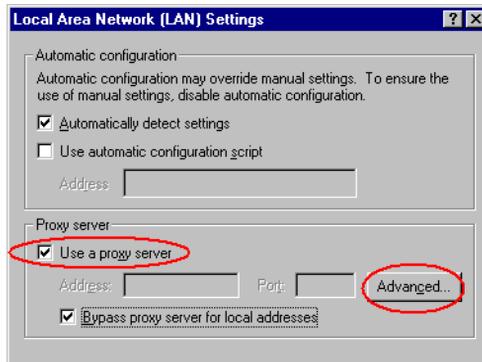
The KEN! icon in the status area of the task bar indicates an active connection with one B channel and an active Internet connection. One LED of the KEN! icon glows green and the globe appears in color.

This concludes the configuration test.

5. If the specified Internet page is not displayed, check the settings again and make any necessary changes.

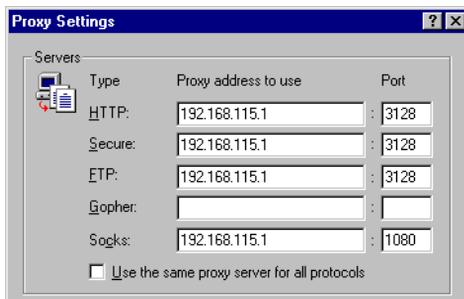
Select the menu commands “Tools / Internet Options...” and then click on the “Connections” page. On this page click the “LAN Settings...” button.

6. Activate the option “Use a proxy server” in the “Local Area Network (LAN) Settings” window and then click the “Advanced...” button.



“Local Area Network (LAN) Settings” window

7. Make sure that the following values are entered for the proxy server:



Proxy settings with the example 192.168.115.1

The IP address of the KEN! Service PC must be entered as the address of the proxy server (see „Step 2: Check the Network Adapter“ auf Seite 19; the IP address 192.168.115.1 is listed as an example there).

8. Leave the Internet Options window by clicking “OK” until all windows are closed and return to the address entry field in the browser.
9. Enter the address of an Internet page again; now the specified page appears.
10. Close the browser. This concludes the configuration.

Other browsers

In order to use Internet services with KEN! it is necessary to activate the use of a proxy server in the browser and to enter the port and address of the proxy server.

Enter the following values for the service types “HTTP”, “Secure”, “FTP” and “Socks”. The IP address of the KEN! Service PC must be entered as the address of the proxy server (see „Step 2: Check the Network Adapter“ auf Seite 19; the IP address 192.168.115.1 is listed as an example there).

Service type	Address of the proxy server (example)	Port
HTTP	192.168.115.1	3128
Secure	192.168.115.1	3128
FTP	192.168.115.1	3128
Socks	192.168.115.1	1080

Step 2: Settings in the E-mail Application

If you have already added a user for the KEN! Client, this user now must be activated in your E-mail application. Read the following sections.

Outlook Express 5

If you are working with Outlook Express 5, these settings can be configured automatically with KEN!.

The following section describes how to start the automatic configuration and how to check the settings after configuration.

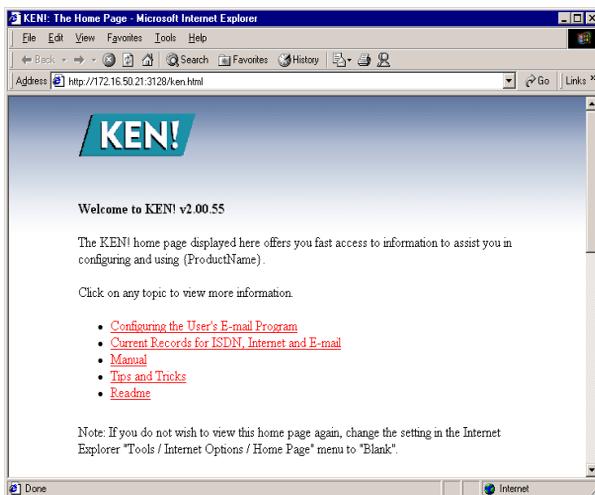
1. Open the KEN! home page by clicking “Start / Programs / AVM KEN! / KEN! Home Page”.

From this page the automatic configuration of the E-mail application Microsoft Outlook Express is started.



The Internet Explorer 5 home page was changed by the KEN! Service installation. After configuring the E-mail user, the home page can be changed again as desired.

Step 2: Settings in the E-mail Application



KEN! home page

2. Click "Configure E-mail program for the user". The following window presents a table in which the users you have created are registered with the E-mail addresses they have been assigned.
3. Click on the respective entry in the "Automatic configuration of Outlook Express" column. The following window appears:



"File Download" window in the Internet Explorer

4. Activate the option “Open this file from its current location”.
5. Confirm the message “Warning: you are about to change your Internet settings.” by clicking “OK”.



Security warning while creating a new user

In Windows 2000, you will now be prompted to select a modem for Internet access. Select “Cancel” and confirm the next two error messages.

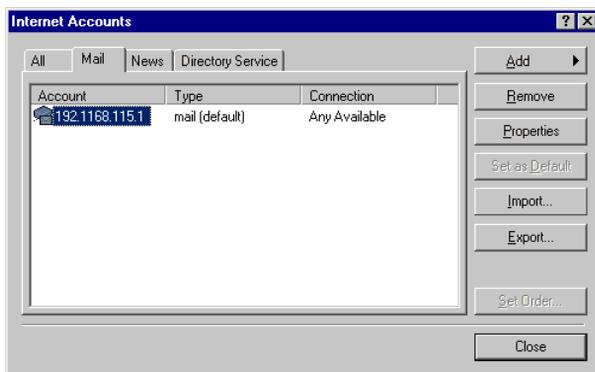
6. Now open the E-mail application Outlook Express.
7. The following window “Logon - <Name of the E-mail account>” appears.



Registration of the user at the KEN! Service PC

8. In the “Password” field, enter the password you have assigned for this user in KEN!.
9. Configuration in Outlook Express was successful if you find the welcome mail from KEN! in the inbox.

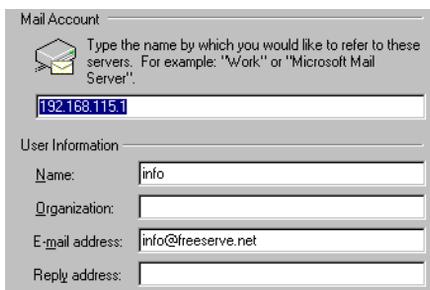
10. If you did not receive a welcome mail, select the menu “Tools / Accounts...”. Switch to the “Mail” settings page. The following window appears:



“Internet Accounts” in Outlook Express with the example 192.168.115.1

11. In this window, activate the account with the static IP address and click the “Properties” button.
12. Check the E-mail address entered on the “General” page.

Instead of the IP address, you can assign the account any name desired.



“General” page in the properties of an account

13. On the “Servers” page, check the entries for the POP3 and SMTP servers. The fields “Incoming mail (POP3)” and “Outgoing mail (SMTP)” must contain the static IP

address of the KEN! Service PC (see „Step 2: Check the Network Adapter“ auf Seite 19; the IP address 192.168.115.1 was used as an example).



“Servers” page in the properties of an account

In the field “Name” the user name from KEN! was entered by the automatic configuration routine.

14. Enter the password for this user in the “Password” field. For reasons of security the password was not transmitted automatically to the E-mail application.
15. Check the “Connection” page to make sure that the option “Always connect to this account using: Local Area Network” is activated.



“Connection” page in the properties of an account

16. Implement your entries by clicking “OK” and then “Close”.

Other E-mail applications

Proceed as follows to activate the newly created user in your E-mail application:

1. Open the KEN! home page by clicking “Start / Programs / AVM KEN! / KEN! Home Page”.
2. Click “Configure E-mail program for the user”. The following window presents a table in which the users you have created are registered with the E-mail addresses they have been assigned.
3. Click on the respective entry in the “Other E-mail programs” column. In the next window, select the E-mail program for which you would like to configure the user.
4. The table that appears contains the data which you must enter for the user in the E-mail application.

3.4 Removing KEN! Client



KEN! must be exited before uninstallation.

To remove KEN! Client, proceed as follows:

1. Exit KEN! by clicking with the right mouse button on the KEN! icon in the status area of the task bar.
2. Click the “Add/Remove Programs” icon in the Control Panel (“Start / Settings”).
3. On the “Install/Uninstall” page, select the list entry “AVM KEN!” and then click the “Add/Remove...” button.
4. Confirm that KEN! is to be removed by clicking “Yes” in the next window.
5. End uninstallation by clicking “OK”.
6. Reboot your computer.

Rebooting the computer concludes the uninstallation of KEN! Client.



Removing KEN! Client does not restore the original settings of your browser and your E-mail application. Any necessary changes, for instance, proxy settings, must be made manually.

4 Overview of KEN!

This chapter provides general information about how KEN! works, along with information about how to configure the KEN! program on the KEN! Service PC.

4.1 Starting and Exiting KEN!

KEN! is started automatically every time Windows is started. Once the program has started, the KEN! icon appears in the status area of the task bar.



The user interface can be opened and closed independently of the KEN! program. As long as the KEN! icon is visible in the task bar, the program is running, even when the user interface is closed.

Opening the KEN! user interface

To open the user interface of KEN!, click on the KEN! icon in the task bar and select the “Open KEN!” command. The user interface is opened.

Closing the KEN! user interface

Select the “Exit” command from the “File” menu.



This command closes only the user interface. The KEN! program continues to run.

Exiting the KEN! Program

To end KEN! operation, click the KEN! icon in the task bar. A small menu appears. Click the “Exit KEN!” command. The KEN! program is ended.

Once KEN! has been exited, ISDN and Internet services via KEN! are no longer available to the network. If you work with the KEN! E-mail server in the network, internal E-mail exchange is no longer possible either.

Starting the KEN! Program

When the KEN! Service PC is started, KEN! starts automatically.

If you have exited the KEN! program, restart it by selecting “Start / Programs / AVM KEN!”.

The KEN! icon in the system tray

The KEN! icon in the status area of the task bar indicates the current status of the KEN! Internet and ISDN connection. The following status messages are possible:



Both LEDs are gray. KEN! is on standby, ready to connect. No ISDN or Internet connection has been established.



One LED is gray, one LED is green. An ISDN connection is active. One B channel is busy.



Both LEDs are green. An ISDN connection is active. Both B channels are busy.



One LED of the icon is green and the globe appears in color. An Internet connection is active. One B channel is busy.



Both LEDs are green and the globe appears in color. An Internet connection is active. Both B channels are busy.



E-mail for the user has arrived at the KEN! Service PC.

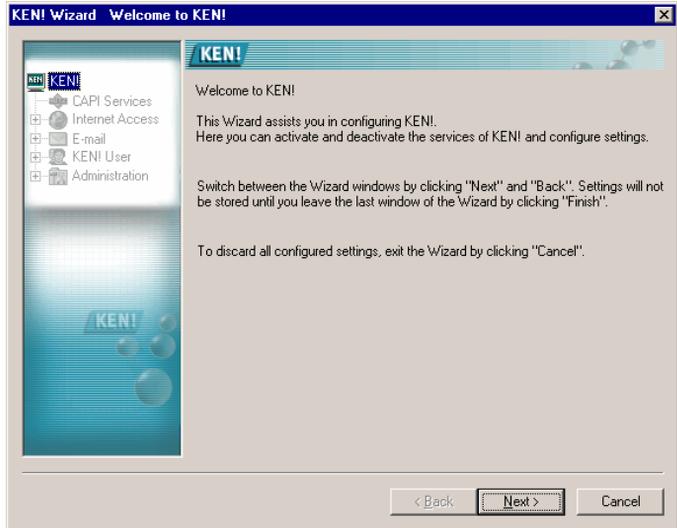


KEN! is not ready for operation. An error has occurred.

4.2 The KEN! Wizards

The KEN! Wizards assist you in configuring KEN! for your network.

After the initial installation of KEN! Service, a Wizard starts automatically to walk you through all of the necessary settings: Here the KEN! services are configured, a user and an E-mail address are created, and settings for the weekly budgets are defined.



The welcome window of the KEN! Wizard

Once you have configured the first settings in KEN!, you can open various Wizards from the KEN! user interface to assist you in adding Internet providers, users and E-mail addresses.

The Wizards are started using the following buttons in the toolbar:



“Add Internet Provider” Wizard



“New E-mail address” Wizard



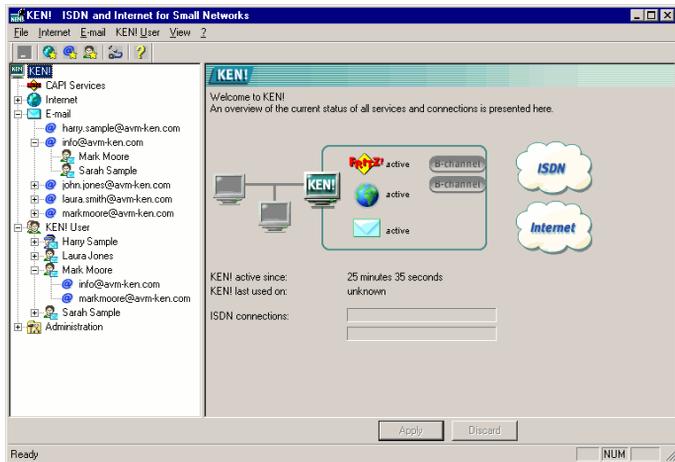
“New user” Wizard

4.3 The KEN! User Interface

The settings for the KEN! services are configured in the user interface on the KEN! Service PC. Start the Wizards for adding users and E-mail addresses or configuring time control for E-mail exchange. Open the user interface by clicking “Start / Programs / KEN!”.



Settings for KEN! can be performed only on the KEN! Service PC.



The KEN! user interface on the KEN! Service PC

The KEN! user interface comprises a services tree and a service area.

The **services tree** in the left section of the window fulfills three tasks:

- Here you navigate among the services.
- The services tree displays all configured Internet providers, E-mail addresses and users, as well as the links between users and E-mail addresses.
- Use the context menu (right mouse button) to add, edit, link and remove Internet providers, E-mail addresses and users.

When a service or another entry is clicked with the mouse, the corresponding information about that element appears in the service area at the right.

The **service area** in the right part of the window fulfills the following functions:

- One function of this window is to display information about the current status of services and connections.
- The services can be activated and deactivated here.
- When an Internet provider, an E-mail or a user is selected in the services tree, all corresponding information and settings are displayed in the service area. The settings can be edited here.
- When you activate the “Expert Mode” in the “View” menu, additional settings pages are displayed in certain sections of the service area on which expert settings can be configured.



The “File / Exit” command closes only the KEN! user interface. The KEN! program continues to run.

Online Help

The KEN! program includes comprehensive Online Help which provides information, tips and step-by-step instructions for configuring and working with KEN!.

Apply settings

Changes to the KEN! settings must be applied before they can be activated and saved. Click the “Apply” button or select the “File / Apply” menu command. If you have made changes and not yet applied them, after a short while a message will remind you to apply them.



When “Settings Protection” is activated in the Administration area, a password must be entered before changes to settings can be applied.

4.4 'CAPI Services': ISDN at every Workstation

CAPI stands for **COMMON-ISDN-API** and is a standardized ISDN programming interface. Communication between ISDN adapters and applications on your computer are controlled via CAPI. These applications, in turn, provide computers with office communication capabilities such as faxing and telephony.

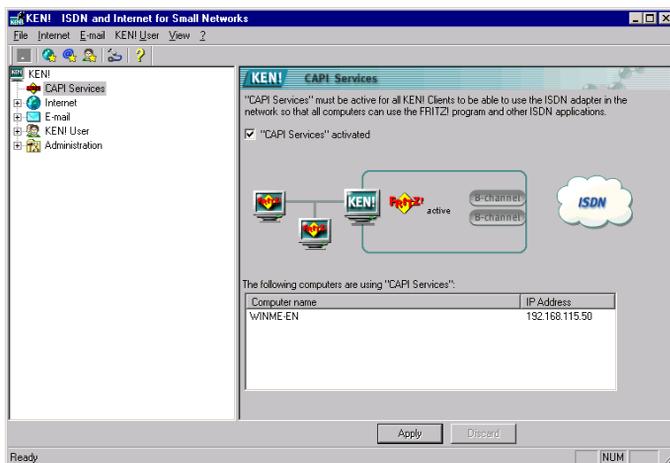
What are "CAPI Services"?

CAPI is installed by default along with the driver software for an ISDN adapter. KEN! Client installs a network version of CAPI, "CAPI Services", on computers without ISDN adapters. This software uses the network connection to access the ISDN adapter in the KEN! Service PC so that each computer functions as if it had an ISDN adapter installed.

Using "CAPI Services" offers a number of advantages. It provides all computers in the network with unlimited access to ISDN services like faxing, telephony, online services and file transfer. All functions are made available over your network, eliminating the need to equip all workstations with ISDN-Controllers. Only the FRITZ! application software need be installed on the individual KEN! Clients.

To send faxes, for example, an ISDN fax device is simulated at the workstation. Using "CAPI Services", the computer forwards the fax through the network to the KEN! Service PC, which then establishes the ISDN connection to the recipient.

In order for all KEN! Clients to use "CAPI Services", the option "CAPI Services activated" must be selected in the "CAPI Services" on the KEN! Service PC. No other additional settings are required.



The service "CAPI Services"

The "CAPI Services" service provides information about the activities of the ISDN B channels and about the KEN! Clients registered on the KEN! Service PC which use "CAPI Services".

How are ISDN Services used?

ISDN services are used through your ISDN communications applications. For instance, when a connection to the AVM Data Call Center is established with FRITZ!data, "CAPI Services" is used to gain access to the ISDN service "File Transfer".

4.5 Internet: Shared Use of One Access

Internet access is the prerequisite for surfing the World Wide Web and exchanging E-mail.

KEN! allows one Internet access to be shared by multiple users. Thus each computer in your network is connected to the Internet. This solution simultaneously saves costs, simplifies configuration and increases security.

The shared Internet access is realized using the KEN! proxy server. The KEN! proxy server makes it possible for two or more users to surf the Internet at the same time using just one B channel of the ISDN line. The other B channel remains free for such tasks as fax reception or incoming telephone calls.

It is possible to exclude individual users from Internet access. Read the section „Granting or Denying Internet Access to Users“ auf Seite 84 for more information.



KEN! establishes Internet connections directly over the CAPI application interface. Internet connections are not established using Microsoft Dial-up Networking. Therefore it is not necessary to install Dial-up Networking, the AVM ISDN CAPI Port Driver or the AVM NDIS WAN CAP Driver.

Access Data for an Internet Provider

In order to enter the Internet with KEN! it is necessary to obtain Internet access from an Internet service provider. The Internet provider supplies you with access parameters for the Internet. The Wizard requests these access parameters for the configuration of a new Internet provider.

The access parameters of the individual Internet providers differ both in terms of the names of the data and in the number of entries required. The entry of access parameters for a number of Internet providers is already preconfigured in the KEN! Internet settings. If your provider is not included in the list, select “Add new Internet provider”.

Name of Internet provider:	UUNet
Number:	010900191799
User name:	anonymous
Password:	
Confirm password:	

Example: Entering the Internet access data in the KEN! Wizard

Automatic Disconnect

In the KEN! Service PC settings you can specify after how many minutes and seconds of inactivity (no data traffic on the line) an existing Internet connection should automatically be cleared down. This function helps save connection costs.

This period is preset to a value of 30 seconds.

If the provider's charge interval is to be taken into account in clearing connections automatically, activate this option and specify the duration of one charge interval. Each charge interval begun is exploited fully before automatically clearing the connection. The connection is cleared two seconds before the next charge interval begins.

Disconnecting automatically				
Clear after	0	minutes	30	seconds inactivity
<input checked="" type="checkbox"/>	Take charge interval into account			
Charge interval:	60	seconds		

Entering the values for automatic disconnection and charge interval

ISDN Channel Bundling

A number of Internet providers offer the option of "channel bundling" to increase ISDN transmission speed. This option allows both B channels to be used for ISDN file transfer.

This makes data transmission over both B channels on one ISDN line at a data transmission speed of 64 kBit/s on each channel. Channel bundling means that data are transmitted at double the speed of single-channel connections.

In KEN! you can define whether to use channel bundling never, always, or depending on the capacity of your connection.

Please note that Internet connections with two B channels mean that no B channel is available for “CAPI Services.” A KEN! Client surfing the Internet using channel bundling would block the KEN! Service PC for all other KEN! Clients wishing to send a fax or transfer a file.



Note also that using both B channels doubles connection charges, as charges accrue for each channel separately.

Proxy Server of the Internet Provider

A number of Internet providers offer the use of proxy servers. Working with a proxy server speeds up access to Internet sites. In most cases the use of an Internet provider's proxy server is optional. Usually you do not need to use the proxy server to dial into your provider. In some cases the Internet requires that the proxy server be used.

Input field for the proxy server

Access to Newsgroups: News Gateway

KEN! contains an NNTP gateway which supports access to discussion forums in the Internet. NNTP is the **Network News Transfer Protocol** used for the transmission of news articles. Every workstation in the local network thus has secure, uncomplicated access to newsgroups in the Internet.

To participate in newsgroups, activate the “Use news server” option on the KEN! “Services of the Internet Provider” settings page in KEN! and enter the name of the news server you received from the Internet provider. Then the IP address of the KEN! Service PC must be entered as the newsgroup server of the E-mail application or news reader.

News server of the Internet provider

Use news server:

Address:

Input field for the news server



The data transmitted over the NNTP gateway are stored on the KEN! Service PC. This means that they cannot be retrieved from the cache.

Multiple Internet Providers

If you wish, you may configure multiple Internet providers in KEN!. With multiple providers you can use Internet time control to take advantage of the most economical rates at any given time.

The Internet connection is always established using the currently **active provider**. The active provider can be defined manually or by means of a time control configuration.

Time Control

You can set up a time profile for KEN! to help save connection costs. Specify here on which workdays and at what time to dial into the Internet with which Internet provider. In this way you can always take advantage of the most economical rate for your connection. You can also enter ranges of time during which no Internet access is possible.

Backup Provider

If you work with multiple Internet providers, you can define a backup Internet provider in KEN!. KEN! automatically switches to this backup provider whenever the active Internet provider is temporarily unavailable. This setting guarantees a successful Internet connection at all times.

Reserving a B Channel for the Internet and E-mail

With this setting you can ensure that it is possible to go on-line whenever you like. When this option is activated, KEN! manages the idle B channels such that “CAPI Services” never use more than one B channel. This means that at all times one B channel is reserved for surfing in the Internet or exchanging E-mail.



Note that when one basic access is being used for one “CAPI Services” connection at the same time as one for a telephone connection also means that both B channels are busy.

Blocking Undesired Internet Sites

KEN! prevents users from accessing the Internet pages registered in the filter list. If a barred Internet site is called up by a user, the Internet browser returns an error.

Suppressing Undesired Banners

The suppression of banner advertising functions similar to the barring of certain Internet sites. An attempt to access banners does not prompt an error, however, but rather results in an “empty” response page.

4.6 Sending and Receiving E-mail

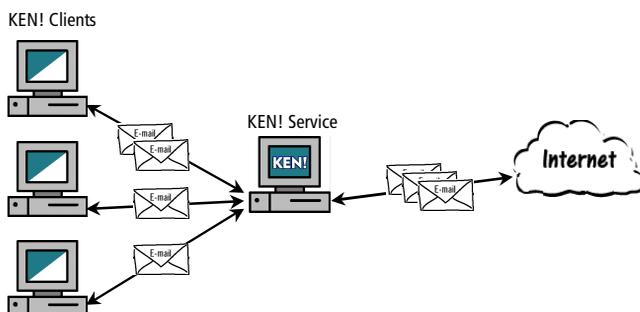
The KEN! E-mail server allows E-mail messages to be sent and received with your preferred E-mail application, just as before KEN! was installed.

In addition to exchanging E-mail with the Internet, with KEN! you can also send E-mail within your network. Even for the exchange of internal E-mail, however, the KEN! E-mail server requires the complete E-mail address.

Users and corresponding E-mail addresses must be configured in KEN! in order to use the E-mail service.

The E-mail service must be activated to send and receive E-mail. Internet access should also be activated. If Internet access is not activated, E-mail can only be exchanged within the network. E-mail messages to addresses in the Internet are then stored temporarily on the KEN! Service PC until the next connection to the Internet, when they are sent to the recipients.

KEN! serves as the intermediary between the Internet and the users of your network. When you send an E-mail message, it is first directed to the KEN! E-mail server. And when you receive E-mail, it comes from KEN!.



The KEN! E-mail server acts as a go-between for E-mail exchange.

All E-mail to be sent to the Internet is collected on the KEN! E-mail server. KEN! exchanges E-mail with the Internet at certain specified times.

E-mail Exchange between KEN! and the Internet

The KEN! E-mail server exchanges E-mail with the Internet on all users' behalf. For KEN! to exchange E-mail with the Internet, E-mail addresses with access data for the E-mail providers must be configured in KEN! Service.



The image shows a screenshot of an email configuration wizard. It contains five input fields with labels on the left and values in the boxes:

- SMTP server: smtp.web.de
- POP3 server: pop3.web.de
- POP3 account name: 987654
- Password: [masked with asterisks]
- Confirm password: [masked with asterisks]

Example: Entering the access data of the E-mail provider in the Wizard

E-mail is sent to the Internet via the SMTP servers of your E-mail providers and received from the Internet via the POP3 servers of your E-mail providers.

Receiving E-mail

Your E-mail provider has one or more POP3 accounts set up on its POP3 server in which E-mail from the Internet addressed to you awaits pickup. Whenever KEN! picks up E-mail from the Internet, it reads the contents of all of your POP3 accounts at the E-mail provider and distributes the E-mail messages to the POP3 accounts on the KEN! Service PC. From there the individual KEN! Users pick up their E-mail.

In order to access your POP3 account on the Internet provider's server, the provider supplies the name of its POP3 server, a POP3 user name and a POP3 password.



The POP3 user name is the name of the POP3 account. This designation is, unfortunately, not used consistently by the various providers and applications. Some refer to it as the POP3 Login Name; others call it the POP3 Account Name.

Sending E-mail

For security reasons (for instance, spam protection), your E-mail provider's SMTP server checks that you are authorized to send mail before dispatching messages. This check generally follows one of the following three procedures:

- Generally the SMTP server checks which Internet provider KEN! used to dial in. If the Internet provider is also your E-mail provider, KEN! is authorized to send E-mail.

- If your E-mail provider works with “SMTP after POP”, KEN! must pick up all E-mail before sending any. The authentication performed when KEN! picks up mail remains valid for a defined period of time during which KEN! can send E-mail.
- SMTP authentication means that KEN! logs in to the SMTP server with a user name and password in order to send E-mail.

Your E-mail provider informs you which procedure it uses to check that you are authorized to send E-mail.

Sending and Receiving over a Secure Connection (SSL)

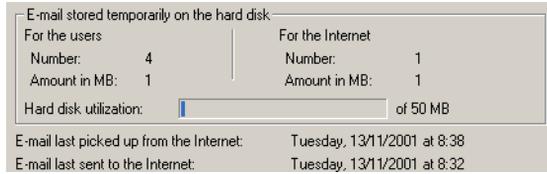
KEN! allows you to use SSL encryption for all communication between the E-mail provider and KEN! transmitted during E-mail exchange with the Internet. Encryption ensures that neither the POP3 login nor the E-mail data can be read by outside parties. SSL support by the E-mail provider’s POP3 server and SMTP server is a prerequisite for protected E-mail reception.

Internal E-Mail address

It is also possible to create E-mail addresses for purely internal E-mail traffic in your KEN! network. Because no exchange with the Internet occurs for these E-mail addresses, no POP3 and SMTP server data are necessary.

E-mail messages stored temporarily on the hard disk of the KEN! Service PC

The “Overview” page of the “E-mail” service offers a summary of the E-mail from the Internet and the messages to be sent to the Internet waiting on the hard disk of the KEN! Service PC.



E-mail messages in the KEN! Service PC buffer

Sending and receiving E-mail as needed

Besides periodic E-mail exchange with KEN!, it is also possible to send or pick up E-mail immediately when necessary. Two options are available:

- Sending or retrieving E-mail immediately



To send an E-mail message to the Internet or pick up a message from your Internet provider's POP3 account immediately, click the "Send/Receive" button in your E-mail application twice within 10 seconds.

- KEN! Kickmail: E-mail exchange on "command"

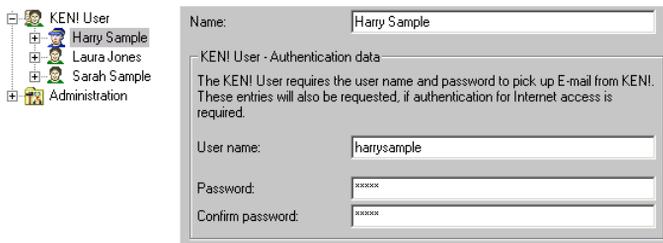
KEN! Kickmail is a program with which each E-mail user can personally organize E-mail exchange.

Opening the program prompts the KEN! Service PC to establish an Internet connection to the Internet provider immediately in order to exchange any accumulated E-mail messages with the Internet.

Kickmail can be started on the KEN! Service PC and on each KEN! Client individually. KEN! Kickmail is located in the installation directory on the KEN! Service PC and the KEN! Clients.

E-mail Exchange between KEN! Users and KEN!

The KEN! E-mail server takes over the task of distributing the E-mail received to the individual users in your network. For this purpose the KEN! E-mail server sets up a POP3 account for each user. These POP3 accounts are stored on the hard disk of the KEN! Service PC.



User login data in KEN!

To send and receive E-mail, the KEN! Users require at least one E-mail address at which they can be reached.

The E-mail application must also be configured for the users, as described in „Step 2: Settings in the E-mail Application“ auf Seite 57. Write, send and receive E-mail messages just as you are accustomed to in your E-mail application.



New incoming mail is indicated by the E-mail icon in the task bar. The users then can pick up their E-mail with their E-mail application.

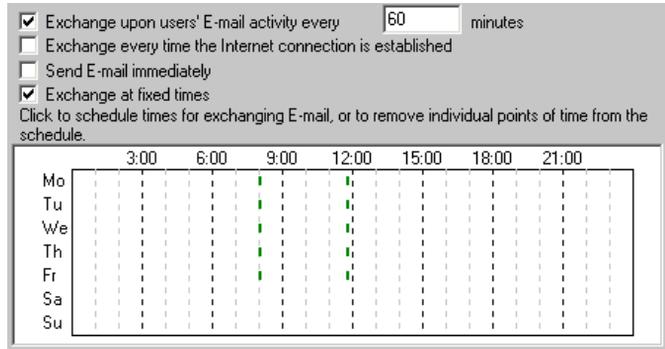
Time-controlled E-mail Exchange with the Internet

Define in the “E-mail / Time Control” area of KEN! when E-mail is to be exchanged with the Internet. E-mail exchange can be controlled using various mechanisms.

You can select one of the time control options or combine the various options:

- Exchange upon users' E-mail activity
- Exchange every time the Internet connection is established
- Send E-mail immediately
- Exchange at fixed times

The following illustration shows an example configuration. With these settings, E-mail is exchanged every workday at 8:00 a.m. and 12:00 noon. In addition, E-mail is exchanged every 60 minutes if users sent E-mail to KEN! service or picked mail up from there in between these times.



Example for time-controlled E-mail exchange

Virus Protection with Norton AntiVirus

If you use the Norton AntiVirus program (NAV) on your system, you can use it to protect your KEN! network from viruses that arrive by E-mail from the Internet. NAV checks all incoming E-mail messages for viruses even before they are received by the KEN! E-mail server. The internal E-mail traffic in your own network is not checked for viruses.



See the 'Tips & Tricks' manual for information about how to configure KEN! and NAV for virus protection.

4.7 KEN! Users

The KEN! Users must be configured to ensure smooth E-mail reception. They also allow individual configurations to be defined for Internet and E-mail communication. Such settings include authorization for Internet access and forwarding incoming faxes to the KEN! Users by E-mail.

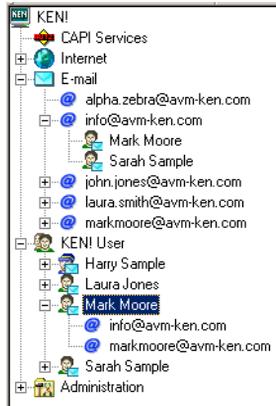
User-specific settings also allow flexible assignment of KEN! Users to E-mail addresses. This means that one user can receive E-mail at different addresses. It is also possible to set up a group of users that can be reached at one jointly used E-mail address.

User and E-mail Address

Users must be configured in KEN! to utilize the E-mail service. A POP3 account is set up on the Service PC for each user from which E-mail for that user can be picked up. Each KEN! User is assigned an E-mail address at which he/she can be reached. It is possible to assign additional E-mail addresses for users who receive E-mail at various addresses.

Similarly, multiple KEN! Users can be assigned to one E-mail address. KEN! distributes any mail received for this address to each user assigned to this E-mail address.

The assignments of E-mail users and E-mail addresses are displayed in the services tree in the KEN! user interface.



KEN! User Display in the Services Tree

Here you can see which E-mail addresses belong to a user and which users can be reached at a given E-mail address.

Forwarding E-mail

KEN! can forward all E-mail for a user so that the user can read E-mail directly from the Internet, or so that a substitute can read a user's mail while the user is on vacation.

With the option "Forward to the user's own E-mail address in the Internet and store it there", all of the user's E-mail is saved both at KEN! and in the Internet, so that the user can also read messages at home or from an external workplace. When the user picks up E-mail from his/her own E-mail address, KEN! leaves a copy on the server in the Internet. Even E-mail internal to the network is sent to this user in the Internet.

The options "Forward E-mail to another KEN! User" and "Forward E-mail to other E-mail addresses" can be used to send copies of all E-mail for a certain user to another E-mail address in the network or to the Internet.

Alternative to these forwarding options, all E-mails for a KEN! User can also be forwarded to another E-mail server in your network. In this special kind of forwarding, the E-mail is deleted at KEN! once it has been transmitted successfully.

Fax and Voice Message Forwarding

KEN! offers you the option of forwarding to users incoming faxes and voice messages from the KEN! Service PC as E-mail attachments. The number which received these faxes or voice messages must be registered to this user in KEN!. If the same number is registered for multiple users, KEN! distributes the messages that arrive for this number to all of these users.

If you activate fax and voice message forwarding in KEN!, KEN! will automatically configure and start the programs FRITZ!fax and FRITZ!vox.

Granting or Denying Internet Access to Users

By default, all users in KEN! may access the Internet. The program does not check for access rights.

If you would like to exclude individual KEN! Users from Internet access, KEN! must check for access rights every time a user requests Internet access. This access check for the Internet can be activated in the Internet settings of the KEN! program by selecting the option “Authentication of KEN! Users required”. This means that every user must log in to the web browser with a user name and password before being granted access to the Internet. If the option “The user is allowed to access the Internet” is deactivated in the “User Data”, the user will be denied access to the Internet.

4.8 Administration: Settings and Information

It is often useful to check the KEN! services in the network and view a summary of the activities of the KEN! Clients. This is the function of the Administration service.

In the Administration area, KEN! offers detailed information about current and past ISDN connections, ISDN utilization records, event logs for each service, and an overview of the automatically assigned IP addresses.

In the Administration area you can also make general settings for the ISDN budget and the TCP/IP network protocol.

The “Administration / Diagnosis” section also includes Dr. KEN!, the diagnosis program for your KEN! installation.

Weekly Budgets

By defining weekly budgets you can determine limits for ISDN connection charges and for ISDN connection time.

Weekly budget calculations always start at midnight on Monday. The connection charges include all ISDN connections initiated by KEN!, including those established via “CAPI Services”.

The charge units and connection times of all KEN! Clients are added for both Internet and ISDN connections and compared with the value entered here. If either of the two budgets is exceeded, KEN! allows no more communication over ISDN. Active connections will be cleared down.



Charges can be displayed in KEN! only if the transmission of charge information is enabled by your network operator. The forwarding of charge information also must be enabled in your PBX.

During some ISDN connections with service numbers, no charge information is transmitted by the telecommunications provider. In such cases the weekly budget must be regulated by specifying a maximum connection time instead.

In order to calculate the weekly budget and to create the record of ISDN use, the cost of one transmission unit from your ISDN provider must be entered in the “Price per charge unit” field.

<input checked="" type="checkbox"/> Total connection time	<input type="text" value="50"/>	hours
<input checked="" type="checkbox"/> Total charges	<input type="text" value="100"/>	\$
<input type="checkbox"/> Transferred Internet data	<input type="text" value="0"/>	MB
Price per charge unit:	<input type="text" value="0.12"/>	\$

Settings for the ISDN weekly budget

ISDN Utilization Record

The ISDN utilization record helps you keep track of total charges.

The ISDN utilization record summarizes the ISDN connections and displays them for different periods of time. The overview contains the number of calls, the duration of each call, the volume of data transmitted and the charges incurred.



Charges can be displayed in KEN! only if the transmission of charge information is enabled by your network operator. The forwarding of charge information also must be enabled in your PBX.

Period	calls	Connection time	Charges	Amount of data transmitted
today	3	00:04:00	0.36 \$	1 MB
current week	20	00:39:50	2.40 \$	1 MB
current month	23	00:43:50	2.76 \$	1 MB
yesterday	4	00:07:20	0.48 \$	1 MB
last week	23	00:43:50	2.76 \$	0 MB
last month	0	00:00:00	0.00 \$	0 MB

Summary of connection charges in the ISDN utilization record



A comprehensive utilization record is available on the KEN! home page. This page presents information about the Internet use and E-mail exchange of all users as well as the ISDN utilization record. The home page can be accessed from any KEN! workstation.

Automatic Assignment of IP Addresses

KEN! uses the TCP/IP network protocol for communication among the computers in your network. This protocol is responsible for the security and quality of data transmission as well as for addressing and identifying computers.

Computer identification is based on the unique assignment of IP addresses. IP addresses consist of four groups of numbers between 0 and 255, separated by periods, for instance, 192.168.115.244. The numbers identify the network and individual computers.

In a small network it is certainly possible to enter IP addresses for each computer by hand. In larger networks with many workstations, however, this quickly becomes a daunting task. Since KEN! Service works with its own DHCP server, it has the potential to assign IP addresses to KEN! Clients automatically. In this case, KEN! internally assigns an IP address from the configured address range to each KEN! Client in your network.



Please note that the IP addresses assigned by KEN! may not conflict with that of the KEN! Service PC. For more information, see the section „The Architecture of KEN!“ ab Seite 91.

If IP address assignment already has been taken care of in your network, either through dynamic assignment by other DHCP servers or through manual assignment at each computer, be sure to switch off the “Activate automatic assignment of IP addresses” option in KEN!.

Automatically Assigned IP Addresses for KEN! Clients

If the automatic assignment of IP addresses is activated both in the Administration area and in the network settings of the KEN! Clients, KEN! displays which KEN! Clients have received an IP address. The display shows the names and the IP addresses of the KEN! Clients.

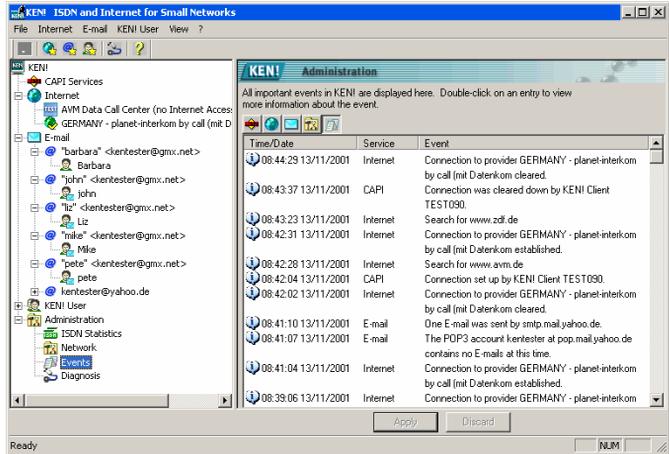
The following PCs have been automatically assigned an IP address:

Computer name	IP address
KEN2	192.168.115.48
KEN3	192.168.115.49
ken_engl	192.168.115.50

Example: IP addresses of the KEN! Clients

Event Logs for all KEN! Services

The “Administration / Events” section lists current, detailed information about Internet and ISDN services. Information is logged about events like established connections, cleared connections, connection errors and error messages. You may obtain information about the last 100 events. This ensures optimal monitoring of connections.



Event log: summary of all services

Log information about all services is presented on the first page of the “Events” section.

Use the following buttons to select the service or the area you would like to view more information on:



“CAPI Ser- Internet E-mail Administration All Events
vices”



Double-click on a log entry to view a separate window with additional information about the entry and any error messages.

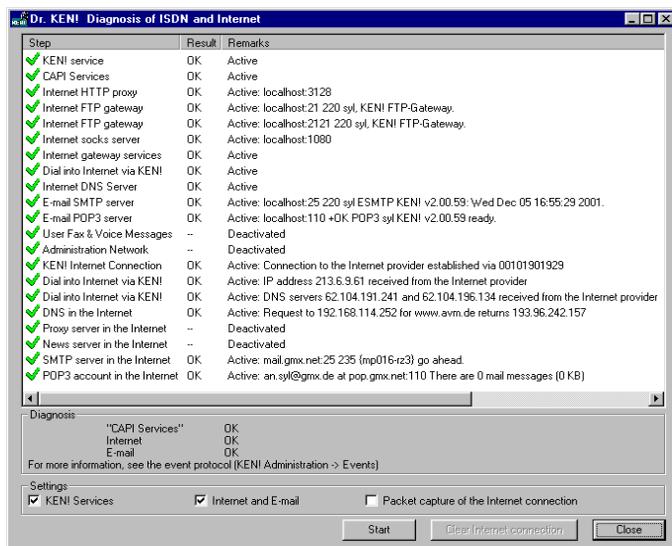
The event logs are extremely useful for error analysis. Whenever something unexpected occurs while working with KEN!, be sure to have a look at the event log.

Diagnosis

In this area you can check your KEN! installation and, if necessary, compile important data for the Support desk. You can also determine from here whether you are working with the latest version of KEN! and update your installation if desired.

Dr. KEN!

Dr. KEN! is the diagnosis program integrated in KEN! to check the configuration settings. Dr. KEN! establishes ISDN and Internet connections and checks that servers in the Internet are accessible, independent of your browser and E-mail application. Dr. KEN! reports which services are available and, in the case of an error, returns a tip about the source of the error.



The Dr. KEN! diagnosis window

An Internet capture logs the exchange of packets during Internet connections. This information can be saved to a file for use in subsequent error analysis.



Reduce the load on the computing capacity of the KEN! Service PC by capturing sessions only to locate error sources. Switch off this option during normal operation.

System Information

When you click the “System information” button, you receive a file containing the following information:

- information about all KEN! settings from the KEN.CFG file in PROGRAMS\KEN!
- all error messages listed in the LOGS folder in the PROGRAMS\KEN! folder
- the capture of all events in the program that are listed in the ACCESS folder in the PROGRAMS\KEN! folder



For your safety, the passwords used in KEN! are always saved in encrypted form. The only exception is for recording sessions with a provider that does not support encryption.

Update

New functions are added to the KEN! software at regular intervals. If you have been operating KEN! in your network for a while and would like to know whether a new update for the program has become available, just click the “Start update” button.

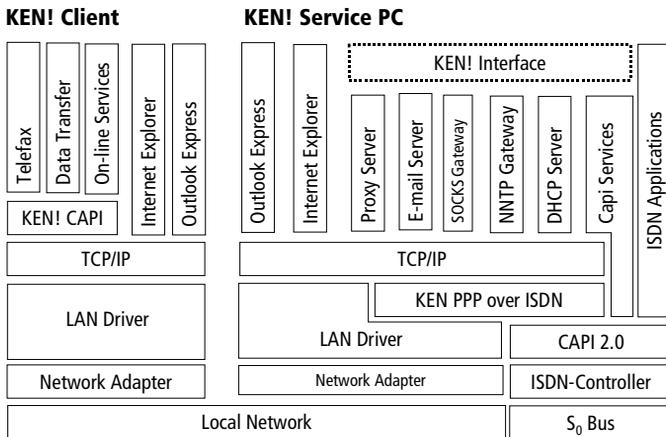
KEN! establishes an Internet connection and then checks the AVM home page to find out whether your installation is the latest version available. If a newer version is available, it is offered as an update.

5 KEN! for the Network Specialist

This compact technical description of the architecture and functions of KEN! addresses only network specialists and aims to present a quick overview of the product.

5.1 The Architecture of KEN!

KEN! consists of two components in the IP network: KEN! Service and KEN! Client. The IP network 192.168.115.0 is used as an example in this manual. KEN! Service generally can be operated in any IP network. The following illustration presents an overview of the interaction between the various KEN! components.



Architecture of the three services of KEN!: Internet access, E-mail administration, "CAPI Services"

KEN! can be operated in any IP network except 192.168.114.0. This address is used internally by KEN! Service as a transit network on the KEN! Service PC.

KEN! Service

The KEN! Service PC consists of a workstation or a server with an ISDN adapter with CAPI 2.0 (e.g., AVM FRITZ!Card or AVM ISDN-Controller B1). KEN! Service provides the local network with the following services:

- Internet connection via ISDN
- ISDN connections for fax, ISDN file transfer, etc.

KEN! Service provides the following applications closely coupled with these services:

- HTTP/FTP proxy for ISDN services with cache
- Gateways (preset for news, socks, FTP, and online services; freely configurable on the IP port level)
- SMTP and POP3 server for E-mail services
- CAPI Services (CAPI 2.0)
- DHCP Server
- DNS Server
- KEN! User administration, facilitates individual settings for E-mail and Internet access

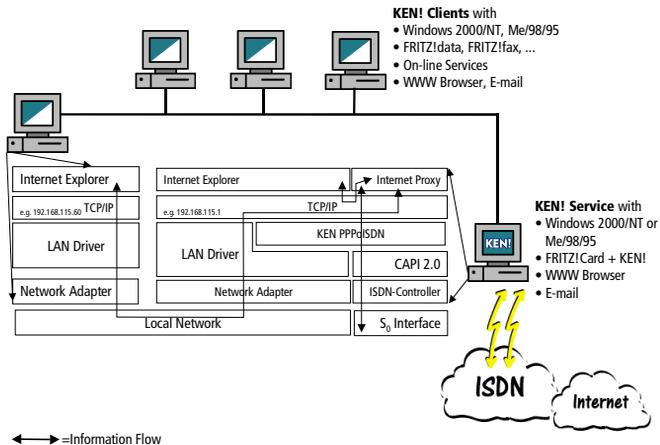
KEN! Client

The KEN! Client serves as the CAPI 2.0 interface for the workstations, displays the current connection status and notifies the user about incoming E-mail. KEN! Client allows workstations to use the following Internet and ISDN applications:

- web browser with proxy support
- E-mail client with SMTP and POP3 support
- CAPI 2.0 applications, e.g. AVM FRITZ!

The KEN! Proxy Server

The KEN! proxy server conducts communication with the World Wide Web on behalf of all workstations in the network (see the illustration). This grants multiple workstations Internet access at the same time via one ISDN connection. Surfing in the Internet is easier and more secure than with a router!



Internet communication with KEN!

The KEN! User's browser (e.g., Internet Explorer or Netscape Navigator) addresses the KEN! proxy through the user's own network. The KEN! proxy uses the ISDN access to the Internet provider to request the Internet address (URL) on the user's behalf and to forward it to the KEN! User. The KEN! proxy can serve multiple users at the same time.

The proxy settings of the browser on the workstations are:

- Proxy server address: the LAN IP address of the KEN! Service PC, in the example network 192.168.115.1.
- Port: 3128 for FTP, HTTP 1.1 and secure
- Port: 1080 for SOCKS 4a/5
- KEN! supports autonomous FTP applications like WS-FTP and CuteFTP through the FTP gateway at port 2121 or port 21.

KEN! proxy functions as a gateway to Internet applications like Telnet or online services with HBCI. KEN! Service translates the inquiries sent to its defined ports at its IP address into inquiries to defined servers in the Internet. The Internet applications of the KEN! Users register the IP address of the KEN! Service PC as their server.

KEN! proxy supports proxy authentication (registration with name and password). When the proxy is activated, access to the Internet can be granted or denied for the KEN! Users individually. Initially a window appears in the browser which requests the KEN! User to enter login data. The services HTTP, FTP and SOCKS v5 are authenticated.

The KEN! proxy saves loaded web sites depending on their cache attributes and age. When a page is requested again, it is retrieved from the cache on the local hard drive and thus accelerated considerably.

The KEN! proxy also supports proxy servers on the Internet provider's end. Proxy-to-proxy communication promises even greater advantages in terms of speed. KEN! supports proxy authentication on the Internet provider side as well.

KEN! proxy logs the URLs requested by the browser, the amount of data transferred and the connection times, all broken down by IP address.

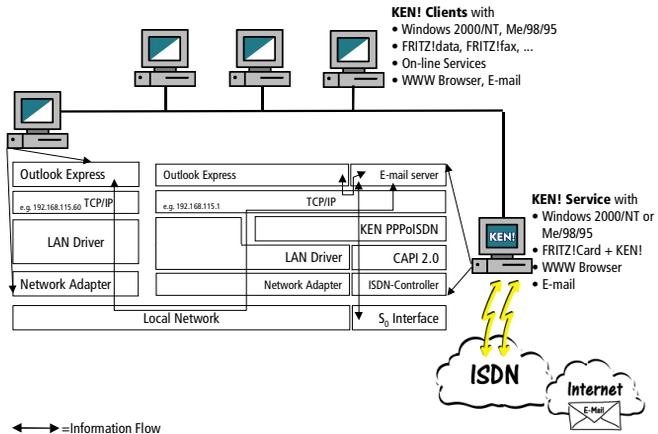
KEN! proxy supports the suppression of banner advertising, which can speed up Internet surfing considerably. The URLs of the undesired banner ads are compiled in a "Filter List" which is compatible with the widespread Junkbuster format (see also <http://internet.junkbuster.com/>).

KEN! Proxy also allows you to suppress undesired URLs so that users are barred from access.

The KEN! Proxy's communication with the Internet occurs through the name resolution internal to KEN! Service and over the default route (o.o.o.o).

E-mail

The KEN! E-mail server conducts E-mail exchange with the Internet on behalf of all workstations in the network. This makes E-mail exchange easier and more economical than with a router. KEN! exchanges all E-mail messages written or received in a given period with the E-mail provider in a single connection.



E-mail communication with KEN!

KEN! Users and E-mail Addresses

One or multiple E-mail addresses can be assigned to each KEN! User. Similarly, one or multiple KEN! Users can be assigned to each E-mail address.

E-mail Exchange between the E-mail Applications of the KEN! Users and the KEN! Service PC

- Over the LAN connection, E-mail messages for the KEN! Users are delivered from the E-mail server of the KEN! Service PC via SMTP and picked up via POP₃. The IP address of the KEN! Service PC is entered in the E-mail applications of the KEN! Clients as both the SMTP server and the POP₃ server: in the sample network, 192.168.115.1.

- Each KEN! User is assigned exactly one internal (local) POP₃ account which can be reached using the login data of the KEN! User.
- The KEN! E-mail Server delivers internal mail locally, without routing them over the Internet.
- E-mail that has not yet been picked up by the user is displayed with an icon in the task bar, as long as the user has exchanged E-mail with KEN! Service.
- Since no charges are incurred for communications within the network, the E-mail application can be configured so that it checks the KEN! E-mail server frequently.
- E-mail from E-mail addresses that are designated in KEN! as “Only use this E-mail address within the local network” are not sent to the Internet. KEN! allows E-mail addresses that are unknown in the Internet to be used exclusively for internal E-mail communication (example: Harry@ken.internal).
- KEN! Users can forward incoming E-mail to other KEN! Users, other E-mail addresses or to their own POP₃ account in the Internet. The last of these options makes it possible to take advantage of E-mail communication from outside the office using any dial-in node to the Internet and POP₃ access.
- E-mail arriving at KEN! can be forwarded to SMTP servers in the local network. This may be a useful option if your network implements Lotus Notes or Microsoft Exchange, for example.
- The KEN! E-mail Server is compatible with E-mail applications by Microsoft, Netscape, and others.

E-mail Exchange between the KEN! Service PC and the E-mail Provider

- The KEN! E-mail Server is compatible with the servers of most E-mail providers.
- Every E-mail KEN! picks up from the Internet provider with POP3 is generally deleted there. However, it is possible to configure KEN! such that all incoming E-mail for individual users is forwarded to the user's own E-mail address in the Internet and saved there.
- KEN! sends outgoing E-mail to the SMTP server bound to the sender's E-mail address.
- KEN! picks up E-mail for all KEN! Users from the POP3 servers linked to their E-mail addresses. KEN! does not limit the number of users supported.
- The points of time at which E-mail is exchanged with the Internet can be defined flexibly. (1) automatically, when KEN! Users deliver to or pick up E-mail from KEN! within a defined time interval (e.g., 60 minutes); (2) automatically every time the program connects to the Internet, e.g., for Internet access; (3) automatically every time a KEN! User dispatches E-mail (in other words: all E-mail for the Internet is sent immediately); (4) like (3), but only for E-mail designated as "urgent"; (5) automatically at points of time defined on a matrix (weekday x time of day); (6) by starting the KICKMAIL.EXE program, for instance, using the Windows Task Planner.
- KEN! Service does not limit the number of POP3 accounts supported.
- The KEN! E-mail server communicates with the Internet via the name resolution internal to KEN! Service and over the default route (o.o.o.o).
- By means of the E-mail address, KEN! distributes the contents of a POP3 account at the E-mail provider to one or more KEN! Users according to their E-mail addresses and to the internal POP3 accounts they have been assigned.

- E-mail that is not unambiguously addressed to a single KEN! User is delivered to the KEN! Postmaster.
- E-mail from mailing lists are generally delivered to the correct KEN! User automatically. If an E-mail from a mailing list is determined to be undeliverable and sent to the Postmaster, the mailing list must be assigned to the user manually (KEN! menu “E-mail / Configure Mailing List Recipients”).

KEN! User

KEN! Users are configured on KEN! Service to simplify E-mail settings and to define the users' authorization and authentication for the KEN! services. A user name and password are assigned to each KEN! User for logging in to KEN! services.

- POP3 login data internal to KEN!
- Access to E-mail service
- Access to the HTTP proxy, Socks5 gateway, FTP gateway
- Forwarding of all E-mail for a user to another E-mail address
- Assignment of faxes and voice messages that arrive at the KEN! Service PC via ISDN to one KEN! User and forwarding as an E-mail attachment

KEN! Internet

This KEN! service takes care of the connection to the Internet provider for the KEN! proxy and KEN! E-mail server and has the following tasks:

- Configuration of one or multiple Internet providers
- One ISDN channel can be reserved for Internet communication. This means that only one channel is then available for other applications like fax communication with FRITZ!.

- The Internet access time control allows access to be deactivated at certain times of day and facilitates automatic time-controlled dialing of configured Internet providers.
- If required by the E-mail provider, Internet providers can be assigned to E-mail providers.
- The configuration of a backup provider can ensure that Internet access is possible at all times, even during temporary outages of the active provider. The program switches to the backup provider when dialing to or PPP negotiation with the active provider fails repeatedly. After one hour KEN! attempts to dial in to the active provider again. This function makes particular sense for providers that are extremely economical, but not very reliable.
- Packet filters for outgoing and incoming IP packets protect the KEN! Service PC from attacks and prevent the system from connecting to the Internet unintentionally through mechanisms specific to Windows, viruses or advertising servers.
- The “AVM KEN PPP over ISDN” network adapter in the Windows network settings is configured and controlled by KEN! Internet.

The Network Adapter Driver “AVM KEN PPP over ISDN”

The network adapter with this name in the Windows Network settings establishes the PPP over ISDN connection to the Internet provider for the KEN! proxy and E-mail server without the restrictions associated with Dial-Up Networking.

The network adapter driver (NDIS) for ISDN adapters (CAPI 2.0) offers the following functions and features:

- For reasons of security, only outgoing calls are permitted; incoming calls are rejected.

- Framing PPP over ISDN (RFC 1618)
 - The network adapter driver “AVM KEN PPP over ISDN” is compatible with nearly all leading providers. The online service AOL is not compatible with the Internet standard and thus can be reached only with the CAPI dial-in software supplied by AOL.
 - The driver software supports data compression according to the STAC and MPPC standards.
 - Multilink PPP (2-channel), also load-dependent (threshold values can be configured).

- Short-Hold Mode

When an Internet connection is not actively in use, the Short-Hold Mode clears down these connections after a specified period in seconds and immediately reestablishes the connection when needed. KEN! takes the charge interval into consideration.

- PPP sessions can be captured with the Dr. KEN! diagnosis program.
- Packet filter for IPX and NetBIOS

A number of network applications constantly exchange packets. When working in ISDN, this frequently can lead to unnecessary connections. For this reason, KEN! contains a number of special packet filters to intercept such packets. Thus such actions as NetBIOS broadcasts can be filtered instead of being transmitted via ISDN.

- IP masquerading / NAT

IP masquerading, or **N**etwork **A**ddress **T**ranslation (NAT) on the KEN! Service PC fulfills two functions: protection against unwanted access from outside, and re-setting the internal IP addresses in a local network to a single external IP address. Masquerading makes one “official” IP address sufficient for communication between your local network and the Internet.

- The IP host address to the KEN! Service PC is 192.168.114.254. It is assigned to TCP/IP permanently during installation.

- The IP host and DNS addresses to the Internet are assigned to the KEN! Service PC dynamically by the Internet provider (IPCP).
- The IP header is converted between its dynamic address and internal address on the KEN! Service PC.
- KEN! Service sets the default route 0.0.0.0 of the KEN!Service PC (only!) to “AVM KEN PPP over ISDN” (192.168.114.254).

IP Name Resolution on the KEN! Service PC

IP name resolution translates domain names like www.avm.de into IP addresses and is performed by DNS servers in the Internet. The KEN! proxy and E-mail servers require name resolution, just as other Internet applications on the KEN! Service PC or KEN! Client PC.

- KEN! contains its own DNS server, which can perform name resolution in the entire network on behalf of the Internet provider’s DNS server. This server is activated in the default configuration as long as no other DNS server is already activated on the KEN! Service PC. The KEN! DNS server is registered automatically in the Windows network settings of the KEN! Service PC.
- The KEN! DNS server makes note of the names already resolved over the course of the KEN! service and answers questions about these addresses locally. A DNS pass list or DNS filter list can be activated as well in order to control direct DNS inquiries.
- The KEN! DNS server performs the actual name resolution using the DNS servers specified in the advanced settings (“KEN! Internet / Advanced Settings / Fixed DNS Server”). The KEN! E-mail and proxy services resolve names in the same way when the KEN! DNS server is not activated.
- Every time it establishes a connection via PPP (IPCP), KEN! determines the IP address of the Internet provider’s DNS server. KEN! forwards to this DNS server all DNS inquiries sent to the IP addresses internal to KEN! Service, 192.168.114.252 and 192.168.114.253. These

two IP addresses are registered as “Fixed DNS servers”. This offers the advantage that the correct DNS server is used, no matter which Internet provider is active.

- In rare cases it may be necessary or advisable to register other IP addresses as “Fixed DNS servers”, for instance when another DNS server is to be used in the local network, or if the Internet provider is not able to transmit the DNS servers in the context of IPCP.

IP Name Resolution on KEN! Clients

IP applications that fall back on HTTP, FTP, POP3 or SMTP (browsers, E-mail applications) do not actually require any name resolution at the KEN! Client since this operation is performed by the KEN! proxy or E-mail server. However, some Java applications, like those for “Chat” or special Internet services, require IP name resolution at the KEN! Client.

For this reason the KEN! Client should register the IP address of the KEN! Service PC (in the example network, 192.168.115.1) as the DNS server in the TCP/IP settings. This is automatically the case when the KEN! Client receives an IP configuration from the KEN! DHCP server.

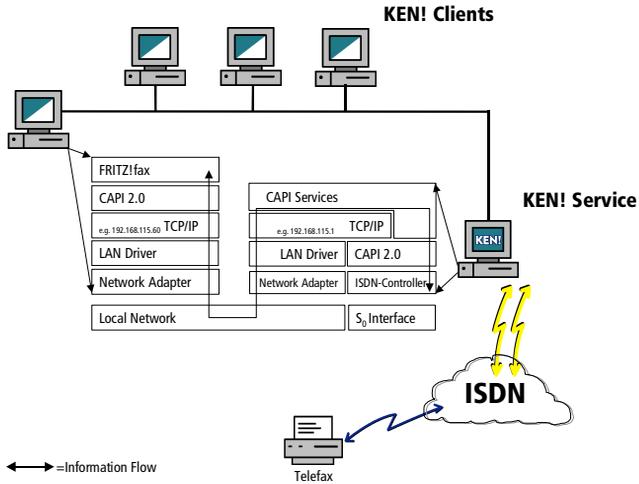
CAPI Services

KEN! Client contains the ISDN applications interface CAPI 2.0. The KEN! Service PC and the KEN! Client communicate via UDP/TCP.

The KEN! package includes the ISDN communications application FRITZ! with licenses for all KEN! Users to use ISDN services. The FRITZ!web module is excluded from the installation routine.

KEN! supports the assignment of multiple subscriber numbers (MSNs) for incoming and outgoing connections.

FRITZ!fax or other CAPI fax applications can send faxes to KEN! Clients and receive faxes from them. For reception all that is required is an unambiguous MSN assignment to the KEN! Client.



Use of the ISDN services via CAPI Services with KEN!

DHCP

The DHCP presettings are compatible with the sample network 192.168.115.0. The KEN! DHCP server has the IP address of the KEN! Service PC, in the example network 192.168.115.1.

The KEN! Clients connected to the KEN! Service PC automatically receive addresses in the range 192.168.115.40 through 192.168.115.50. The KEN! Clients obtain the IP address of the KEN! Service PC as their DNS server.

5.2 Installation and Integration of KEN!

General information about KEN! Installation:

- If the network already operates with TCP/IP, generally no changes to the IP network are necessary. Before installing KEN!, make sure that the TCP/IP stack is bound to the network adapter and that an IP address is specified.
- The KEN! package also contains the current web browsers from Netscape and Microsoft. Use of the Microsoft Internet Explorer 5 along with Outlook Express 5 is recommended, as KEN! supports the partially automated configuration of this browser and its corresponding E-mail application.
- The KEN! package also includes FRITZ!, the ISDN application for telefax, ISDN file transfer and much more.
- “Routing/IP-Forwarding” normally should be deactivated in the TCP/IP settings of Windows 2000 and Windows NT. Otherwise the KEN! Service PC will function as an ISDN router, which is generally undesirable as unnecessary connections to ISDN or the Internet may result.
- Limits can be set on connection time, connection costs and data transferred over ISDN. When these limits are exceeded, KEN! will not establish any more connections.
- KEN! installation includes the services, the KEN! icon in the task bar and automatic configuration of Internet Explorer 5.
- The KEN! icon in der task bar displays:
 - Internet connections established (globe)
 - data transfer to the Internet (spinning globe)
 - use of the ISDN B channels
 - E-mail for the current KEN! User on this workstation awaiting pickup (envelope)

Supplementary information about the KEN! Service PC

On the KEN! Service PC (only!), a transfer network 192.168.114.0 is installed for the internal communication of the KEN! services among each other.

In a local network with LAN routers, note that the default route (0.0.0.0) on the KEN! Service PC (only!) shows “AVM KEN PPP over ISDN” (192.168.114.254). This means that communication of the KEN! Service PC with the other LAN segments may be limited unless the local routing table (route print) is extended (route add).

The KEN.CFG file contains the entire configuration which is activated when KEN! Service is started.

The ACCESS.LOG file contains a detailed log of the activities of the KEN! services, including a description of the data packets that initiated the connection.

KEN! Service includes an automatic diagnosis by Dr. KEN! of its own services, the Internet access and the E-mail server of the Internet provider. The diagnosis also allows you to capture a PPP session.

The entire KEN! configuration can be password-protected from changes by third parties.

A user can work on the KEN! Service PC just as productively as on a KEN! Client, as the KEN! services work in the background. CAPI applications work directly on the CAPI of the ISDN adapter and not over the “CAPI Services” of KEN!.

Supplementary information about KEN! Clients

Three versions of the installation are available for KEN! Clients: ISDN, Internet, and a combined installation of ISDN and Internet.

ISDN installs the CAPI 2.0 interface, a program group and the KEN! icon for the task bar.

Internet does not necessarily require a Client component! The KEN! Client for Internet installs the KEN! icon for the task bar along with an automatic web browser configuration (IE 4 and 5).

Since the E-mail Clients and KEN! Service have a local TCP connection, the Client can check for new E-mail as often as desired without incurring any charges, ensuring that the Client receives new E-mail immediately.

The “Update” and “Refresh” buttons in the browser update the corresponding web site in the KEN! proxy cache.

In very special cases it may be necessary to install a SOCKS-capable extension/replacement for the WINSOCK interface in order to establish communication via the KEN! SOCKS server. An example of a WINSOCK extension is SocksCap32 from NEC (<http://www.socks.nec.com>).

Glossary

Alias

Alias means “other”, “else” and “also known as”. An alias is often a short, catchy substitute for a long, complicated string of characters, for example, the actual name of the user J.Smith@my-internet provider.com in place of the string 030123456@my-internet provider.com. Here the name “J.Smith” functions as an alias for “030123456”.

Cache

A cache is a memory between slow and fast units, in which frequently requested data are stored. A cache is used to reduce access times.

KEN!'s cache saves the last Internet sites visited in its memory, as long as the settings of these Internet sites permit storage. When a user requests a site which has already been visited, this site is provided quickly and economically from the cache, without having to establish a new connection to the Internet.

As opposed to off-line browsers, only pages for which storage is permitted are saved in the cache.

CAPI (COMMON ISDN API)

CAPI is a standardized software interface which allows applications easy access to ISDN adapters at basic and primary rate accesses. Applications designed for this standardized interface use uniformly defined mechanisms for communication over ISDN connections and need not be adapted for various manufacturers' hardware. This makes CAPI applications independent of any future hardware extensions or changes. CAPI makes such changes transparent to the applications.

CAPI comprises an abstract definition of ISDN services, independent of the underlying telephone network and the adapters used to connect to ISDN. It provides an interface easy for applications to use and thus affords uniform access options

for a wide variety of ISDN services including data transfer, speech and fax transmission, video conferencing and telephony.

Chat

A “conversation” conducted using the keyboard and monitor screen. Messages, questions and responses are entered by means of the keyboard; all participants in the discussion can then respond. In addition to regular or permanently established forums, there are also numerous “live chats” which often occur just once on a certain topic.

DHCP

DHCP stands for **D**ynamic **H**ost **C**onfiguration **P**rotocol. DHCP is used to automatically assign the individual workstations IP addresses from an address range. Other information such as the name of the domain, the standard gateway and the relevant DNS server can also be provided to the Clients.

For smooth operation in a TCP/IP network, all devices in a local network require unambiguous IP addresses. They also need the addresses of the DNS servers and of a standard gateway through which data packets are to be routed from addresses not locally accessible.

In a small network it is certainly possible to enter IP addresses for each computer by hand. In larger networks with many workstations, however, this quickly becomes a daunting task.

DNS

Domain **N**ame **S**ervice (DNS) is an address conversion service responsible in TCP/IP networks like the Internet for the conversion of the numerical version of an IP address to a legible text form. It converts the names of servers into a numerical address format.

Since assigning and registering numerical IP addresses can be quite involved, non-coded text names are used to access computers in the Internet, like “www.avm.de”, for instance. But who knows what IP address is behind the address

“www.avm.de”? The DNS server takes care of the assignment of text names to numerical IP addresses and the forwarding of data to the corresponding computers. Another computer in the Internet which has only the symbolic name of its destination (e.g., www.avm.de), can send a request to this server to obtain the corresponding IP address.

E-mail

The term E-mail (= **E**lectronic **M**ail) designates a type of communication in which information (texts, images, graphics, etc.) are transmitted electronically from a sender to a recipient. E-mail functions are supported both by local networks (see LAN) and by the worldwide Internet. E-mail service is a service in the Internet.

FTP

The **F**ile **T**ransfer **P**rotocol between a computer and an FTP server. FTP allows access to data archives of any kind in the Internet.

Gateway services

KEN! proxy works as a gateway to Internet applications like Telnet and home banking with HBCI. KEN! translates the requests arriving at its IP address to defined ports into requests for defined servers in the Internet. The Internet applications of the KEN! Users register the IP address of the KEN! Service PC as their server.

HBCI

The **H**ome **B**anking **C**omputer **I**nterface is a standard accepted by the leading credit institutions to create a unified basis for online banking.

HTTP

The **H**ypertext **T**ransfer **P**rotocol, in combination with the World Wide Web, has become one of the most important Internet protocols. Its primary task is to transmit HTML documents from WWW servers to a user's WWW browser. HTTP can also be implemented as a protocol for general forms of

data transfer. The protocol exchanges information according to the Request/Reply principle. Newer versions of this protocol are equipped with a simple mechanism for authentication and for the negotiation of display options.

IMAP

Internet **M**essage **A**ccess **P**rotocol; an E-mail protocol that allows clients to process E-mail on the server. It also allows folders to be created on the server to sort E-mail. IMAP was developed to transmit messages only when they are needed: Unlike in POP3, the user can select which data are actually to be transmitted to his/her own computer. Moreover, initially only headers are transmitted in IMAP4; attachments are not included.

Internet

The Internet is a worldwide, decentrally organized computer network for international data and information exchange. The following services are available in the Internet: E-Mail, WWW, USENET and FTP. Additional Internet services include Telnet (terminal emulation) GOPHER (directory-oriented catalog) and WAIS (**W**ide **A**rea **I**nformation **S**ystem); these are being replaced increasingly by the graphical and multimedial World Wide Web.

LAN

LAN (**L**ocal **A**rea **N**etwork) refers to a local network for a limited space such as several offices or a fixed complex of buildings. LANs generally serve only computers within a given company. LANs can exhibit ring topology, bus topology or star topology, and may exhibit either a peer-to-peer or a client-server structure.

NNTP

The **N**etwork **N**ews **T**ransfer **P**rotocol: a standard for the creation, forwarding, distribution and receipt of articles in Internet news groups (Usenet).

Peer-to-Peer Network

A peer-to-peer network works without central control of access. This means that all computers have the same access rights. Data connections are always established directly from one computer to another without interacting through a network server.

Proxy server

A proxy server performs all WWW communication on behalf of all workstations in the network. This means that two, three or more workstations have access to the Internet at the same time over just one connection. This makes Internet access easier and more secure than with a router.

POP3 Account

E-Mail messages are distributed to various POP3 accounts on a POP3 server. The POP3 server of the E-mail provider or Internet provider sets up a folder for each POP3 account, in which mail is stored temporarily for retrieval by the user.

Providers generally create only one POP3 account for each E-mail address. All E-mail is temporarily stored in this POP3 account.

The KEN! POP3 server sets up a local POP3 account for for each user, even if users share a POP3 account or even an E-mail address in the Internet. When KEN! picks up E-mail for the local network from the Internet, it distributes the messages among the KEN! POP3 accounts so that each user can pick up the mail addressed to him/her personally.

POP3 Server

POP3 is the **P**ost **O**ffice **P**rotocol version **3**. This protocols describes a procedure for TCP/IP-based access to an E-mail server for the transmission of the messages on the server to an E-mail user. Your provider's POP3 server is the server responsible for the reception of your mail messages from the Internet.

The name and the IP address of the POP3 server are included in the documents containing the Internet access parameters supplied by your E-mail or Internet provider.

SMTP server

SMTP is the **S**imple **M**ail **T**ransfer **P**rotocol. SMTP is the standard protocol for exchanging E-mail in the Internet. SMTP defines how two E-mail systems interact with each other and what the control messages must look like. SMTP messages consist of a header, which includes at least the IDs of the sender and the recipient, and the actual message. The SMTP server of your Internet provider is the server responsible for sending your mail to the Internet.

The name and the IP address of the SMTP server are included in the information about Internet access supplied by your Internet provider.

Socks

Socket Secure Server; socks is a standard which grants computers in the “internal network” access to resources outside a firewall, whenever such Internet or TCP/IP services as FTP, Telnet or WWW are used. SOCKS maintains the security conditions guaranteed by the firewall.

SSL

Secure **S**ocket **L**ayer; protocol for the encryption of messages in the Internet. SSL can be implemented in combination with application programs like SMTP, Telnet, FTP and HTTP and builds on TCP/IP. The protocol provides for complex 128-bit encryption of the data transmitted in the Internet. High security is guaranteed by the fact that the encryption key must be re-determined individually and is saved on the user's PC rather than being transmitted in the Internet.

TCP/IP (Transmission Control Protocol / Internet Protocol)

TCP/IP is the “language” of the Internet. TCP/IP designates the totality of all protocols which facilitate data exchange in the Internet. The protocols contained in TCP/IP include the protocols for downloading files (FTP) and for handling E-mail

communication (SMTP). TCP/IP is currently available for nearly all system platforms. TCP/IP thus offers the invaluable advantage of smooth communication between networks and computer systems that are actually incompatible.

Transfer protocol

A transmission protocol is a standardized agreement about the modalities of data exchange between two computers communicating with each other. Transfer protocols control such elements as the block size used during data transmission, and they determine the procedure followed when transmission errors occur. The best known transmission protocols include TCP/IP, XModem and ZModem.

6 Support

AVM offers numerous information sources to support you in everyday operation of KEN!. New drivers for your AVM ISDN-Controller and updates for the KEN! software are available free of charge from the Internet or the AVM Data Call Center. If you are unable to solve any problems which arise during operation, you have the option of contacting AVM Support.

6.1 Information Sources and Updates

Information about all components of KEN! is provided in the following:

Online Documentation



- Readme file for KEN! located in the “KEN!” program group. The Readme contains current information which was not yet available when this manual was printed.



- Help files for the TCP/IP settings and the AVM KEN PPP over ISDN driver. The Help files, INSTAL98.HLP for Windows Me/98, INSTAL95.HLP for Windows 95, INSTALW2.HLP for Windows 2000 and INSTALNT.HLP for Windows NT are located in the KEN! installation directory on the KEN! Service PC.



- Online Help for KEN!. When the KEN! user interface is open, view Help for the current field by entering the function key “F1”. Use the “?” button to obtain comprehensive Online Help.



- The KEN! program group contains the PDF manual “Tips & Tricks”. This file offers useful hints to assist you in working with KEN! and presents answers to frequently asked questions which may be of assistance if problems arise.



- The KEN! program group also contains a copy of the latest manual in PDF format.



If your computer is not equipped with the Adobe Acrobat Reader for reading PDF documents, this reader can be installed from the PROGRAMS\ACROBAT directory on the CD.

Update from the User Interface

New functions are added to the KEN! software at regular intervals. If you have been operating KEN! in your network for a while and would like to know whether a new update for the program has become available, just click the “Start Update” button in the “Administration / Diagnosis” section of the user interface.

An Internet connection is established and the program checks the AVM home page to find out whether your installation is the latest version available. If a newer version is available, it is offered as an update.

The AVM Internet pages

AVM also offers comprehensive information and free updates on the Internet. Just call up www.avm.de/en for access.

- The “Products” section presents detailed information about all AVM products along with announcements of new products and new versions.
- From the “Service” category the FAQs may be accessed. FAQs (Frequently Asked Questions) are lists with answers to frequently asked questions. Search for concrete support advice here.
- Through “Download” the current driver software for KEN! and all other AVM ISDN-Controllers may be downloaded.

All programs and drivers that can be downloaded from the AVM Internet site are also available on the AVM Data Call Center (ADC). The AVM Data Call Center can be reached by dialing the following number with FRITZ!data (IDtrans protocol).

+49 (0)30 / 39 98 43 00

6.2 Support Desk



Please use the information sources listed above before contacting the Support desk!

If you were not able to solve your problem with the tips offered above or using the various information sources listed, contact AVM Support for additional technical assistance. The Support desk can be reached by E-mail or by telefax.

Support by E-mail

Support inquiries can be sent to AVM by E-mail. Please use the E-mail form available at the following address on the Internet site:

<http://www.avm.de/en/service/support/>

- Select the "KEN!" entry.
- Fill out the form and then click the "Send" button to send it to AVM Support.

Support by fax

If you do not have Internet access, the Support desk can be reached by fax at the following number:

+49 (0)30 / 39 76 849

Please include the **Product Identification Code (PIC)** printed on your CD case. Support staff always requires your PIC before providing support. Please also supply the following information to the Support desk:

- the version of KEN! with which you are working
The KEN! version number can be obtained by clicking the menu command "? / About KEN" on the KEN! Service PC.
- the operating system of the computer where KEN! Service is installed (Windows 2000, Windows NT 4.0, Windows Me, Windows 98 or Windows 95)

- the operating systems of the individual computers where KEN! Client is installed (Windows 2000, Windows Me/98 or Windows NT 4.0)
- the kind of network you work in: a peer-to-peer network (without a server), a Microsoft network (NT server) or a Novell network
- the current TCP/IP configuration: Are the workstations operating with static IP address assignments? Do the workstations receive their IP addresses from KEN! or from another DHCP server?
- the KEN! service for which you are requesting support: “CAPI Services”, E-mail, or Internet Access
- the location of your problem: does it occur on the KEN! Service PC, on one or all of the KEN! Clients, or on all KEN! computers?
- the ISDN-Controller installed in the KEN! Service PC: which driver version and which build are you using?

The driver version and the build of AVM ISDN-Controllers can be obtained from the “Readme” file in the installation directory of the ISDN-Controller. If FRITZ! is installed on the KEN! Service PC, the driver version is also available through the menu commands “Start / Programs / FRITZ! / FRITZ!version”. Then click the “System Information” button in the “FRITZ!version” window.

- Which browser and which E-mail application do you use? Please list the versions as well.
- whether your ISDN-Controller is operated at a PBX
- the step of the installation or application at which an error message appears
- the exact wording of any messages returned
- whether it is possible to establish a successful test connection to the AVM Data Call Center (ADC) with the ISDN-Controller



If a connection to the ADC is not established immediately, try again. The ADC may be busy at peak times.

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