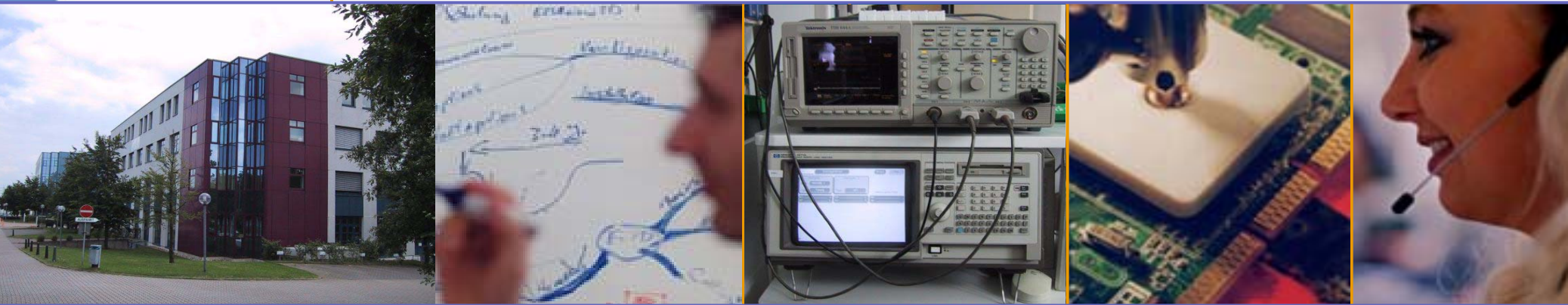


LANCOM Systems

Business Networking Solutions



LANCOM Firmware Version 2.82

February 10th, 2003

LANCOM Systems GmbH, Wuerselen, Germany

www.lancom.com

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The Firewall Upgrade.

On the following pages we would like to give an overview of the new features of the LANCOM Software on this CD.

▶ Supported
LANCOM devices:
800, 1000, 1100, 2000,
DSL/10, DSL/I-10,
DSL/1610, DSL/I-
1611, 821, 1621, 4000
Series, 6000 Series,
Wireless L-11/IL-11,
3050 Wireless, 7011
VPN

▶ Also for ELSA
LANCOM and
Deutsche Telekom T-
Octopus LAN R800, T-
Octopus LAN R1600
VPN and T-Octopus
LAN W3050



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Stateful Inspection Firewall

Stateful Inspection

- ▶ Adds detailed state tracking for all connections to the LANCOM port filter firewall
- ▶ Many new action and trigger objects
- ▶ Integrated DoS protection, Intrusion Detection, IP Quality of Service and Traffic Shaping
- ▶ Ports are opened and closed dynamically on demand
- ▶ Firewall filter rules become direction-aware

Stateful Inspection Firewall

The security check for all connections. All packets, which do not belong to a well-known session, are rejected. The firewall opens and closes ports dynamically on the application's demand (e.g. for FTP, Netmeeting / H.323 or IRC).

Furthermore, the firewall rules become direction-aware: Connections can be established only from a filter's source to its destination, but not vice versa.

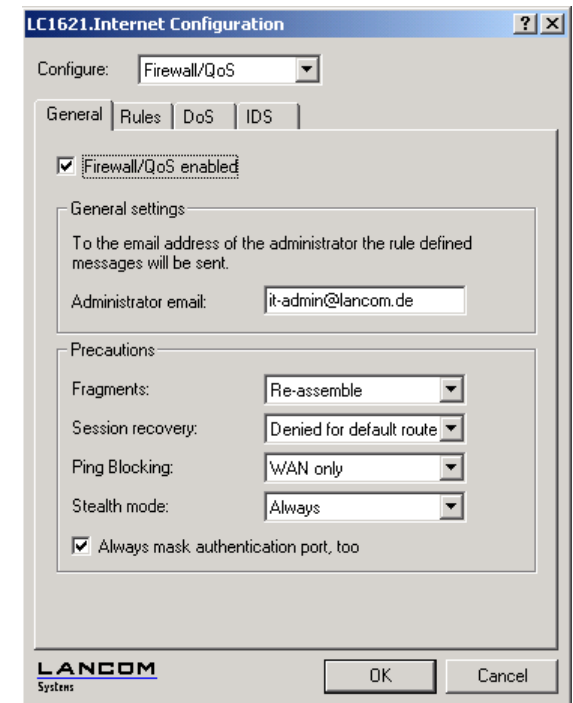
Denial of Service Protection (DoS)

Recognition, alerting, logging and countermeasures against known hacker attacks such as SYN flooding, Smurf, LAND, Ping of Death, Teardrop, Bonk and fragment-related attacks such as Fragrouter.

Intrusion Detection (IDS)

Recognition of port scans and IP spoofing. Hide the device by PING blocking and TCP Stealth mode.

For further details, please refer to the firewall chapter 2.2 in the LANCOM reference manual..



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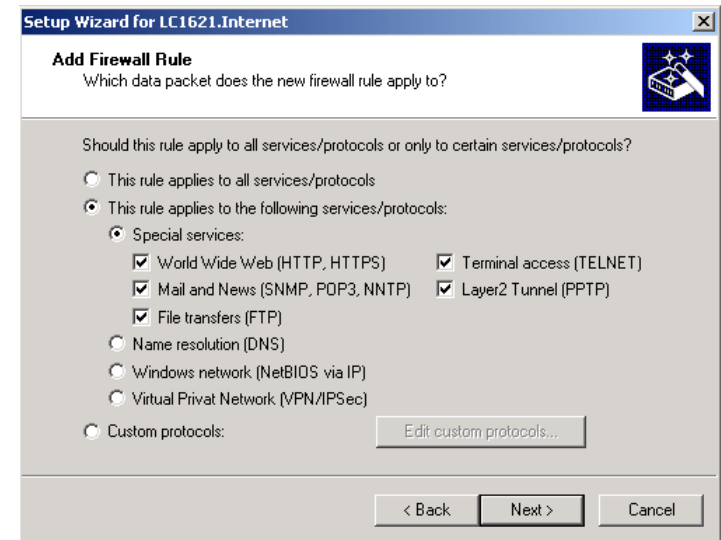
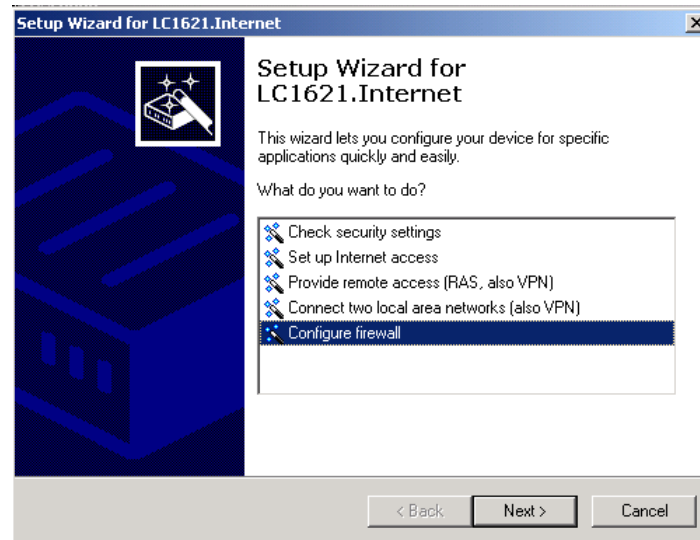
Firewall Highlights (1)

Easy set-up

- ▶ Our Setup Wizards guide you when configuring a customized Firewall
- ▶ New Firewall configuration dialogs in LANconfig
- ▶ Comfortable Firewall monitoring with LANmonitor
- ▶ More than 40 pages background-information in the updated reference manual

New LANconfig Firewall and Security Assistants

A customized firewall setting is supported by the new Firewall Assistant with its pre-configured objects. The Assistant „Check Security Settings“ helps to find common security holes.



For effective firewall and security strategies, please refer to the according chapter 2.2.4 of the LANCOM reference manual.

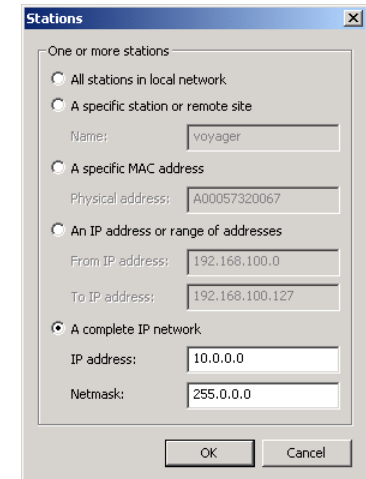
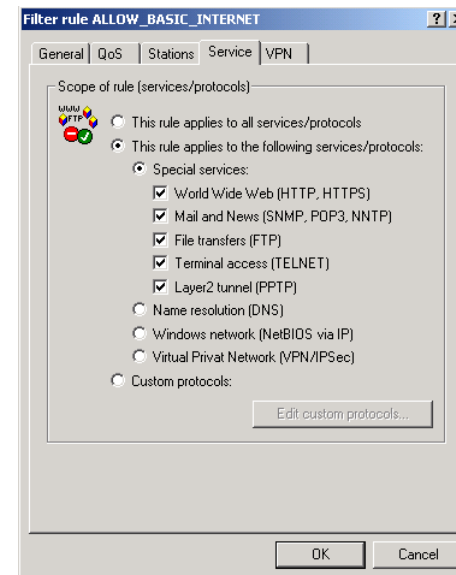
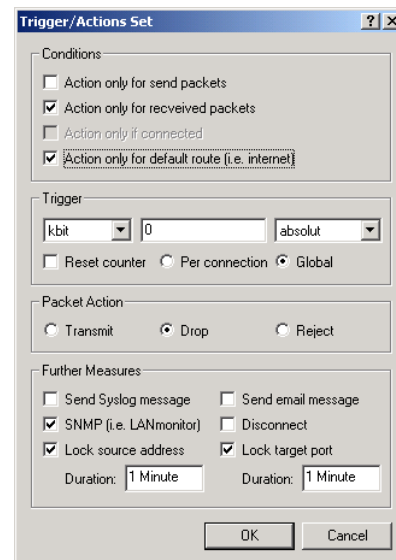
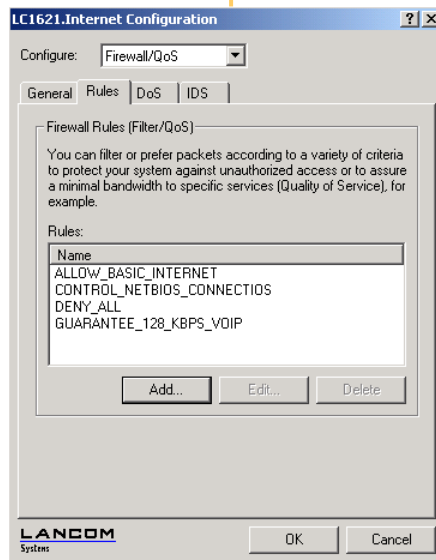
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Firewall Highlights (2)

Flexible Firewall settings for professionals

LANconfig offers powerful Firewall configuration options through many new triggers, actions, source and destination and protocol objects.



All items provide a detailed context-sensitive Help function.

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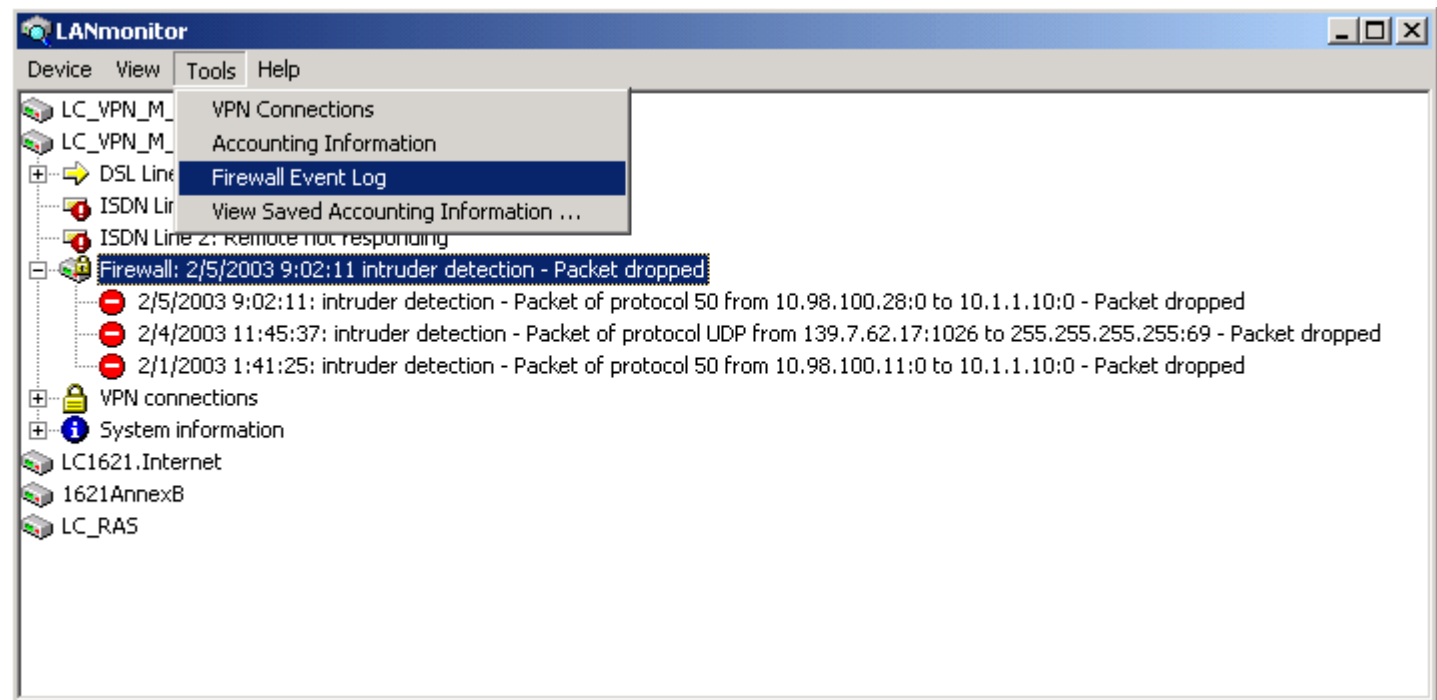
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Firewall Highlights (3)

Comfortable Firewall Monitoring and Event Logging with LANmonitor

Alerting and logging

- ▶ Write Firewall Log files via „Device / Properties“ in LANmonitor on a regular basis
- ▶ LED security alerts with LANCOM 7011 VPN and DSL/I-10 (upon model year 2003)
- ▶ SYSLOG
- ▶ SNMP
- ▶ Email
- ▶ Logging within the LANCOM under „status/ip-router-statistics/log-table“



Further levels of detail can be expanded easily just by double-clicking the entries.

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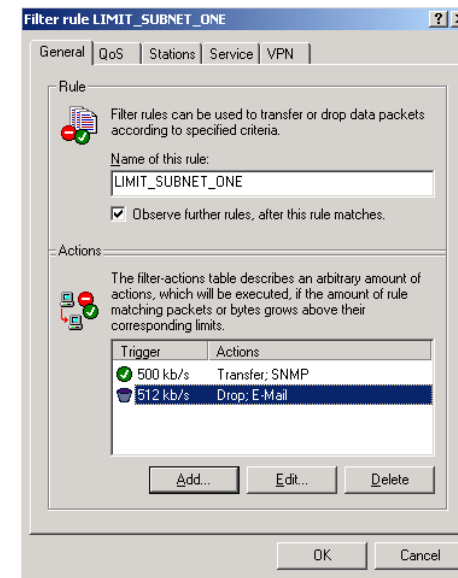
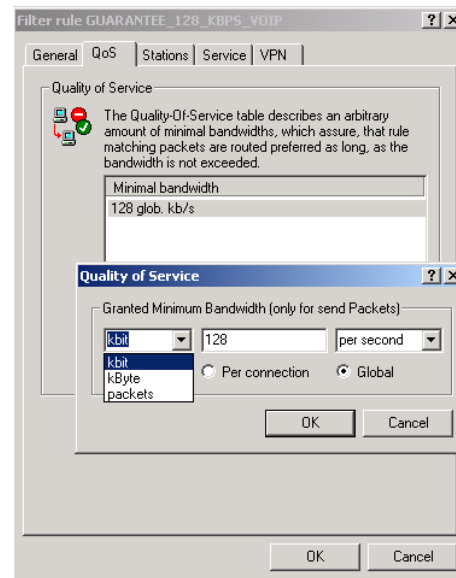
Firewall Highlights (4)

Features and Applications

- ▶ Trigger: Transferred data volume or throughput rates
- ▶ restrictions and guarantees per user connection or global
- ▶ Notifications or limits on exceeding of certain transfer amounts
- ▶ Limitation of the per user available FTP bandwidth
- ▶ Guaranteed bandwidths for VoIP or video conferencing
- ▶ QoS for applications, which on their part do not provide such mechanisms themselves

IP QoS and IP Traffic Shaping

A traffic shaping with dynamic minimum and maximum bandwidths helps to balance several subnets, critical applications (such as VoIP or videoconferences) and web server accesses on a shared line.



In case the requested guaranteed bandwidth is no longer required, it is automatically at the disposal of other applications again.

See LANCOM reference manual chapter 3, „Quality of Service“.

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VPN Highlights

„Aggressive Mode“ support for enhanced VPN interoperability

LANCOM VPN gateways now support mixed installations with 3rd party VPN gateways or VPN clients, especially in conjunction with dynamic IP addresses (IKE Aggressive mode).

New: VPN Client Setup

This can be accomplished easily by the extended LANconfig Setup Wizard „Provide remote access (RAS, also VPN)“ – either pre-configured for the LANCOM VPN Client, or in a generic form for 3rd party VPN Clients.

Furthermore: More VPN channels!

The Firewall Upgrade automatically enlarges existing 5 channel VPN options to the 25 concurrent connections of the LANCOM VPN-25 Option.

The number of configurable remote sites is enlarged to 50 (VPN-25) resp. 25 (VPN-1).

Note: VPN requires a LANCOM VPN Option or integrated VPN (LANCOM 6000 and 7000 series)

Connection list - Edit Entry

Name of connection: VPN_CLIENT [OK]

Short hold time: 0 seconds [Cancel]

Extranet address: 0.0.0.0

Remote gateway: 0.0.0.0

Connection parameter: AGGRESSIVE_MODE

Dynamic VPN connection (only with compatible remote stations):

- No dynamic VPN
- Dynamic VPN (a connection is created to transmit IP addresses)
- Dynamic VPN (IP addresses are transmitted without establishing a connection if possible)
- Dynamic VPN (an ICMP packet will be sent to transmit IP addresses)
- Dynamic VPN (an UDP packet will be sent to transmit IP addresses)

IKE Exchange (only in conjunction with "No dynamic VPN"):

- Main Mode
- Aggressive Mode

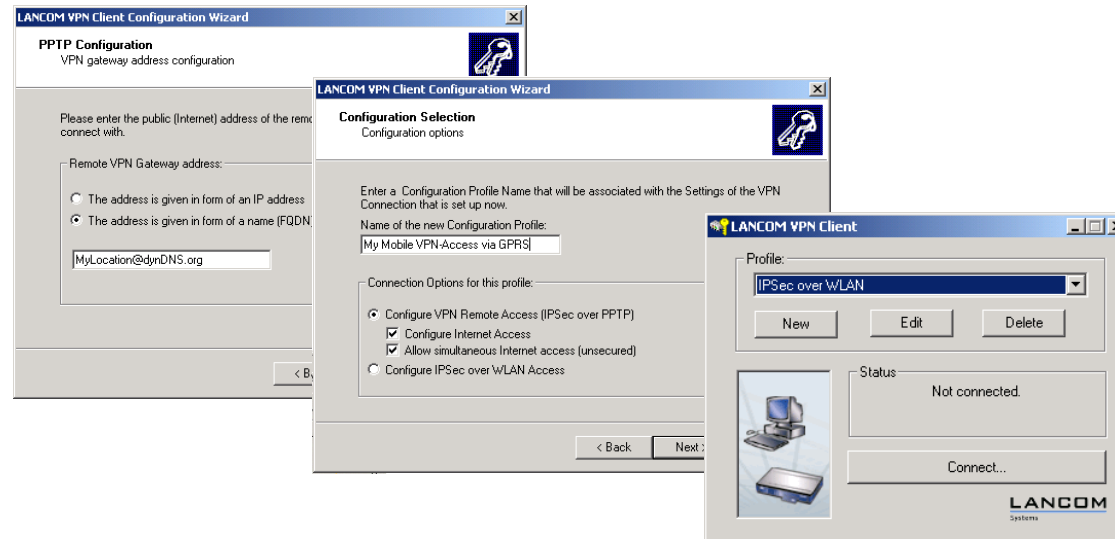
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The LANCOM VPN Client

Features

- ▶ VPN access with or without simultaneous Internet
- ▶ **Dynamic DNS**- Access to central sites with dynamic IP addresses (for external dynDNS clients, see LANCOM reference manual „Dynamic DNS“)
- ▶ IP address assignment: clients gets an local Intranet address via „IPSec over PPTP“
- ▶ Binding of the VPN connection to certain dial-up Internet connections
- ▶ 168 Bit 3-DES encryption



- ▶ Profiles for „VPN Remote Access“ and „IPSec over WLAN“
- ▶ For Windows 2000 and XP – **free of charge!**
- ▶ Comfortable, Wizards-based Installation
 - ▶ *LANCOM VPN Client Setup Wizard*
 - ▶ *LANconfig Setup-Wizard „Provide Remote Access (RAS, also VPN)“*

Please find further information and concrete application examples in the LANCOM VPN Client user's manual

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Other Highlights

Email notifications

E.g. on DoS attacks, intrusion attempts, on exceeding of transferred volumes and in general for user-definable Firewall events.

Configure your LANCOM's email account with LANconfig on „Log & Trace / SMTP Account “. Enable the notification for DoS, IDS and per each Firewall rule.

New WEBconfig

The enhanced WEBconfig features new the well-known LANconfig-style comfortable configuration dialogs (feature not for all products available).

NAT / Masquerading enhancements

- ▶ H.323 Supports video conferencing and Microsoft Netmeeting
- ▶ IRC Supports DCC connections
- ▶ IPsec Multiple VPN tunnels per client PC

Wireless LAN Security with 802.1x

Secure Wireless LANs with 802.1x for dynamic key exchange of the WEP keys (LANCOM 3050 Wireless only)

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Network Time Protocol

NTP-Client

- Timeserver via DSL

- NTP Server with „Open Access“ policy available via Internet

SNTP server for the local network

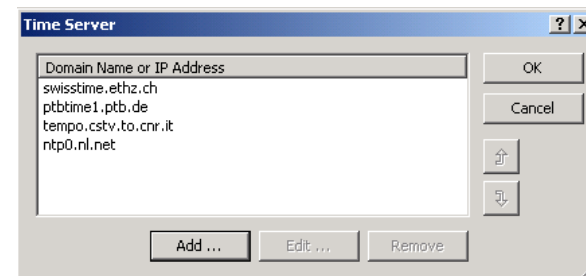
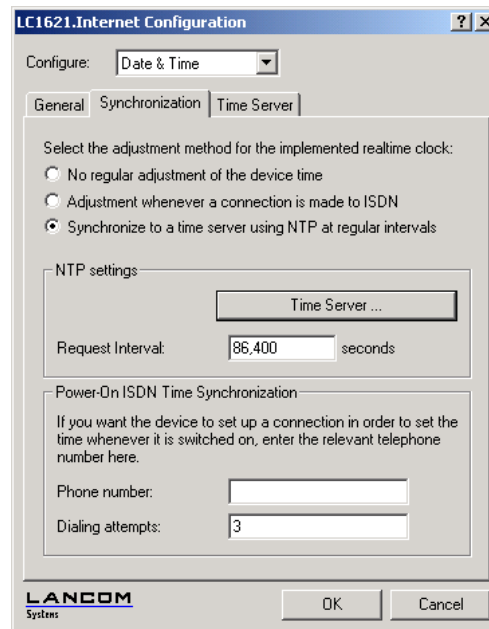
- LANCOM serves as central timebase for the workstations

- Windows XP has a built-in NTP client

- NTP Clients are available for all operating systems via Internet (e.g. „NetTime“)

Time Server for the local network

LANconfig features a drop-down list with preset, public accessible NTP server domain names. Thus all PCs within the local network can be provided with an accurate date and time.



Bugfix: Starting with this release, the built-in NTP client of Windows XP is supported directly.

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Software Roadmap

Feature Updates (planned Q2/2002)

- ▶ **Complete Dynamic DNS Integration**
 - Integration of an Dynamic DNS Client
 - DNS-resolvable name as VPN remote site
 - DNS-resolvable name as device address in LANconfig and LANmonitor

- ▶ **Volume-based Budgets**
 - Support of volume-limited flat rate tariffs

- ▶ **Scheduled Events**
 - Execution of Command Line Interface commands at regular, predefined times

- ▶ **VLAN support**
 - Separated VLAN Ethernet segments, e.g. for separation of Access Point administration from user traffic.

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We wish you all the best with your new LANCOM product.

We'd be happy to receive your feedback – either positive or negative, as well as feature suggestions via email to info@lancom.de.

Please find actual support information on our Internet support site, or in the enclosed support leaflet.

In case you were not able to resolve your questions by reading our manuals, please contact your local distributor for further assistance.

Your LANCOM Systems Team.

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