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| README file for
|
|      LANCOM Firmwares
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| LANCOM Systems GmbH                    www.LANCOM.de
| Adenauerstrasse 20
| 52146 Wuerselen
| Germany
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1. Firmware-changings from 2.80 -> 2.82

    new features and adaptations

    - IRC masquerading
    - Windows XP NTP Client can now receive the time by a LANCOM SNTP Server
    - adaptaions for the use of AirLancer MC-2 cards in LANCOM Accesspoints
    - TCP packets with ECN-flags set are accepted
    - several bugfixes

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2. Firmware-changings from 2.72 -> 2.80

    new Features:

    - Stateful-Inspection: Only self-initiated data transfer is allowed.
      All packets not belonging to a known session are rejected. All ports
      needing a connection are opened dynamically (e.g. FTP, Netmeeting, H.323)
    - defense against Denial-of-Service-attacs (e.g. fragmentation-"error",
      SYN-Floodings)
    - Intrusion Detection of portscans; "hiding" of the device by PING-blocker
      and stealth-mode.
    - IP QoS: "preferring" of data packets, that are identified matching a
      firewall rule (e.g. guaranteed minimum bandwith fpr VoIP traffic or
      other applications or services)
    - IP-Traffic Limiting: limitation of bandwidth (e.g. FTP-speed per user limited
      ,
      all FTP-users not more than 1MBit/s)
    - e-mails are sent now by request e.g. at attacs, intrusions or eceeding
      transfer volumina
    - VPN IKE aggressive mode support
    - new WEBconfig: It now shows a LANconfig-like menu for ease-to-use
        configuration
    - H.323 masquerading: VoIP telephones and Netmeeting are supported
    - NTP server can be found by URL ncluding drop-down list with free time servers
    - secure wireless LANs by supporting 802.1x for dynamic key change

adaptations/corrections:

- SNTP trace added
- default time zone changed to +01
- Firewall default objects received additional PPTP and IPsec
- frequent search for NetBIOS station in local network
- ADSL multi mode detection improved. Timeout is longer to allow longer
synchronization times
- IPsec masquerding now accept connections without lifetimes
- IPsec masquerding now accept lifetimes without length-information
- captial letters are now ignored in DNS fiter list

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3.   Firmware-changings from 2.70 -> 2.72

    - VPN optimizations for complex network struzctures
        - NetBIOS name informations are being transferred securely
        - NetBIOS names of masked devices are not propagated
        - LANCOM Business 6011/6021 Timeslot 16 at G.703 connections

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4.   Firmware changings from 2.62 -> 2.70

        new Features:
        - First firmware for LANCOM Systems devices. It is fully backwards
          compatible to the former ELSA devices.
        - support of HTTPS for secure WEBconfig configuration and wireless
          public spot login
        - support of BusinessOnline in the wizard for internet-connections
        - IP Quality-Of-Service: Support of TOS "Low Delay" and DiffServ
          "Expedited Forwarding". Packets with these attributes are preferred
          for routing and marked in VPNs.
    - NTP-Client, SNTP-Server: Ability of getting the actual time from a
          timeserver.
        - Backup connections via separate backup list (e.g. provider with
          different acces data for DSL and ISDN)
        - Connection survey has been extended, polling list to insert
          accessible IP addresses
        - rights for Telnet, TFTP, http, https and snmp can each be managed
          individualy
        - IPsec-Pass-Through: besides PPTP-masquerading, also IPsec masquerading
          is now supported
        - using the IP parameter list, also addresses for PPTP can now be set

        adaptations/corrections:
        - adaptation for LANCOM Systems
        - adaptaion of the wizards for WEBconfig
        - behaviour of VPN connections via the LAN interface has been corrected
        - MAC Address Filter functionality on virtual interfaces (VPN connections)
        - to ignore filter rules referring to VPN policies can be set
        - different settings of numbers on the ISDN interfaces are now managed
          correctly (Business 4100)
        - optimized VPN surroundings

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5.   Firmware-Aenderungen von 2.50 -> 2.62

    - solved problem in outband
    - os_panic at udp portscan fixed
    - all udp ports are closed during portscans
    - idle time 9999 is ignored for VPN-connections
    - layer 2 and layer 3 have the right number of connections
    - SNMP MIB: commands are interpreted as strings
    - os_panic in channel statistics fixed
    - DHCP requests for fix addresses fixed
    - TCP-options (for FTP and PPTP) are considered for masquerading
    - erasing errors out of channel statistics using LANmonitor

- os_panic in PPTP/VPN-Client connection fixed
- os_panics at disconnect of "PPTP over VPN" connections fixed
- Backup delay is considered after fallback out of backup
- possible loss of Queue Blocks during passive disconnect fixed
  (ADSL)
    - error messages in LANmonitor can be erased
    - physical connections are now separated regarding the
      virtual channel (PPTP/VPN)
- improvement of speed of PPTP connection
    - DNS domain forwarding works with (separated) VPN and PPTP
      connections
    - changings in some texts for WEBconfig
    - CHAP reauthentifaction uses the user data of the remote user
      and not of the default user
    - CHAP reauthentication is only used when first authentication
      has used CHAP
    - PPTP works in LAN
    - during reboot all PPTP and VPN connections are closed
    - CRC10 calulation and check on OAM cells
    - correct use of internet and intranet addresses for VPN
    - no more data loss when debugging via telnel
    - DNS forwarde now works correctly on masked connections
    - corrected texts for RAS wizard in WEBconfig
    - /setup/ab-module can now also be configured in WEBconfig
    - ADMIN User is rejected when WAN configuration is set to
      'not allowed'
    - WAN IP addresses can now be reached also from LAN
    - PPTP-server cooperates with distant NAT connections
    - Blinking codes "configuration not secure" and "fee limit"
      don't interleave anymore
    - corrected selection for interfaces in spanish, french, portuguese
      and italian
    - fixed problems with PPP-connections in WEBconfig wizard
    - LC6000-Internetwizard: if S0-bus is selected, now the provider
      list is shown instead of generic 'Internet' provider.
    - in VPN sublinemode, LANCOM is reachable through the tunnel on
      its 'internal' IP address

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6.   comments, known problems

        Please first install the actual LANtools.
    Then start LANconfig and load the firmware up using the
    button "Firmware-Upload".

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7.   Support

        Internet: www.lancom.de/support

        An online support assistant, new firmware and informations
        can be found here.