

Information regarding Release

HiLCOS Software Version 8.80

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Table of Contents

1. Preface.....	2
2. Known Issues	2
3. New Features and Improvements since Version 8.52	2
WLAN	2
Network Connectivity.....	3
4. New Features and Improvements since Version 8.52	4
5. Comments	5

1. Preface

This document describes the innovations within HiLCOS software version 8.80.
Version 8.80 supports OpenBAT and BAT54/300 products.

2. Known Issues

HiLCOS Version 8.60 does not contain a PROFINET IP and Ethernet/IP stack for OpenBAT devices.

In rare cases, WLAN interfaces may encounter unrecoverable errors. When an unrecoverable error occurs, the WLAN module resets. This reset leads to a disruption of the WLAN connection for approximately 10 seconds.

3. New Features and Improvements since Version 8.52

WLAN

- If all WLAN channels are blocked due to DFS detection this is reported to WLAN log table and syslog.
- Implementation of WLAN Band Steering
- Implementation of Spectral Scan for OpenBAT
- Implementation of IPv6 components for OpenBAT
- Support for DFS 4.
- Support for Public Spot Administration portal SmartTicket.
- Release for DNS domains in the Public Spot table "Free Networks".
- Implementation of an XML interface between the BAT Public Spot module and an external authentication gateway
- Public Spot users who authenticate via the internal BAT RADIUS server no longer have to pay attention to upper-/lowercase letters when entering their usernames.
- The device displays the link state of a WLAN Point-to-Point connection.
- The device allows you to configure the thresholds for point-to-point connections.
- WLAN performance improvements between IEEE 802.11/n- and a/b/g clients (Airtime Fairness)
- In Greenfield mode, the device rejects IEEE 802.11a/b/g clients.
- In the Public Spot table, "Free Networks", you may use wildcards.
- Using a WLC, the device allows you to assign different RADIUS servers to the Access Points for each SSID.
- The device allows Public Spot user management via separate access rights.



The **Hirschmann™** BAT Operating System

- If a BAT dual radio client roams, the device maintains one WLAN module connection to the “old” access point until the device obtains a second WLAN module connection to the “new” access point.
- The device allows you to inhibit probe responses with an empty SSID via a “Closed Network” switch.
- Using the WEBconfig's PublicSpot Wizard A it is possible to configure multi-login.
- Using the WEBconfig's PublicSpot user management it is possible to display extended status information. If the wizard deletes a user, he will be de-authenticated immediately.

Network Connectivity

- If you store a configuration script on an ACA, the device verifies that the file is of the specified type.
- A script file cannot be uploaded as device configuration (*.lcf) in WEBconfig.
- Migration of IPv4 and IPv6 (Dual-Stack)
- Implementation of the IPv6 firewall
- Support for stronger key lengths for encrypted connections.
- The device allows you to store the Syslog, eventlog and bootlog outputs on the flash boot-persistent.
- The device allows you to upload the configuration files and certificates to the LANCOM via SSH.
- The device writes the configuration changes to the syslog protocol.
- By default, the syslog output now shows new entries at the top of the table.
- Pre-calculation of Diffie-Hellman keys for faster connection establishment
- SNMP read access via community “Public” is possible on VPN connections also.
- Support for IPsec Replay Detection
- By default, the device no longer writes the accounting data to the syslog protocol.
- Configurable SSH protocols and key lengths
- In exclusive mode, the device uses the DSLoL interface by default
- The device records network traffic via WEBconfig (Wireshark compatibility).
- Support for the Link Layer Discovery Protocol (LLDP)
- Multiple VPN errors can be reset using only one command.
- The status tree displays the number of encrypted (PPTP-) connections.

4. New Features and Improvements since Version 8.52

- Implementation of a new configuration menu for the OpenBAT Relay functionality
- Red flashing Power-LED signalizes “unsafe configuration” when using the standard HAC password.
- Deleting values in the LAN-Bridge address-table, accelerated
- The device now activates the new adopt rate mechanism “Minstrel” by default.
- xAUTH connections that are authenticated via RADIUS are no longer limited to 250 negotiations.
- The device allows you to allocate separate group keys for each VLAN via IEEE 802.1x connections.
- The device allows you to configure 16 Point-to-Point connections per WLAN module.
- Support for TLS 1.1 and 1.2
- In order to show the “Location” and “comment 1” information in column view, the device transfers the information to LANconfig.
- The device now allows you to generate Wireshark compatible trace files.
- The device allows you to encrypt PPTP connections (MPPE).
- The device allows you to create additional administrators with a password length of more than 16 characters using WEBconfig.
- NAT-Traversal activated by default (e.g. after configuration reset)
- The device allows you to call table rows recursively by “cd” and “ls”, resulting in a well-arranged display.
- The device allows you to call the “ls” console command recursively.
- The vendor class identifier is now configurable for DHCP.
- The device allows you to configure a loopback address for communication with a Content filter-rating server.
- The device allows you to use a single remote station of a load-balancer in the firewall.
- The device no longer forwards packets with a source and destination address in the LANCOM device’s LAN (backrouting trap).
- The device now negotiates 256 concurrent IEEE 802.1x connections at the same time.
- The maximum amount of clients in the PublicSpot module is now configurable.
- The voucher wizard within the PublicSpot module is now able to print multiple vouchers at the same time.
- It is now possible to specify forwarding address URLs with a length up to 251 characters within the PublicSpot module.
- Implementation of an improved automatic radio field optimization

5. Comments

If you want to upgrade the firmware of your device to a new version, please install the latest LANconfig version first. **Before running the firmware-upload, you should save the router configuration to a file.** After that, you can use LANconfig to load the latest HiLCOS-version into the device.