INTERMEC

Mobile LAN™

TECHNICAL BULLETIN

NUMBER: 6154 DATE: 03/19/2004 REVISION (A)

SUBJECT: **Mobile**LAN™access R1.93 Software Release

PRODUCTS AFFECTED: All Intermec **Mobile**LAN™ Access Points

The following Tech Bulletin from Tom Seedorff is intended to bring you up to speed on the **Mobile**LAN™access R1.93 Software Release. In general, when looking for new software for MobileLAN products, we will have these available at: http://mobilelan.intermec.com then click on 'Service & Support' and then select 'Downloads'.

If you have additional software requirements for the AP that are not addressed at this time, please forward these requirements to Swaran Arneja and Tom Seedorff.

Additional documentation can also be found at: http://rftest.norand.com/ap.htm

<u>Recent release history:</u>
R1.93 - Released in March/2004.
- The software version was v6.40, Boot Rom was v5.56.
- Key Fixes in R1.93:
    - o 802.11b radio would get into a state where it could not transmit frames. The client device shows a strong radio connection to its AP, and the client does appear in the AP Connections screen, but the client device cannot communicate to its host.
    - o We had an issue with a RADIUS server that would sometimes respond from a different IP address than that to which a RADIUS request is sent. We added support to handle this situation.
    - o Upgraded the 802.11b radio station firmware to v8.75.
    - o Working with Microsoft VPN's. We have addressed an issue where we were not working properly with Microsoft VPN's.

R1.91 - Released in October/2003.
- The software version was v6.36, Boot Rom was v5.55.
- This release will work on all MobileLAN access AP platforms, but the key fixes are for the WA21 and WA22.
- Key Fixes in R1.91:
    - o WA2x intermittent problem where Agere .11b radios in the AP would not start properly. AP's experiencing this problem prior to R1.91 need to be 'power cycled' rather than warm booted to have this fix applied properly.
    - o The EAS required a root certificate be installed for PEAP authentication to work. The kicker is the EAS didn't actually use the certificate. The requirement for the root cert for PEAP has been removed.
    - o Fix for Secure-Only configuration of web browser access setting (the initial link would fail)
    - o Fixed a bug that caused us not to check optional parameters in hello frames unless IAPP security was turned on. The only side affect of which we are aware is that access points would attach to spanning trees on different IP subnets.

R1.90 - Released in July/2003.
- The software version was v6.34, Boot Rom was v5.55.

Technical Bulletin

- This release was for all MobileLAN access AP platforms.
- The key features of this release:
  - ❑ Ease-of-Use:
    - AP Configuration Wizard
    - "Find this AP" button
    - AP Configuration "checking"
    - AP Configuration "hyperlinks"
    - Domain Name Server support
    - IP Tunnel filter to support the Air Fortress gateway
  - ❑ Security:
    - Single VLAN per AP radio
    - AP Spanning tree security - 802.1x authentication between APs
    - EAS:
      - Supports more simultaneous authenticating clients
      - EAP-PEAP Support
      - now allow the ACL password to be user configurable
    - Better checking to see if clients have received 802.1x encryption key changes
    - "Fast roaming" for the 24XX family is always enabled, and does NOT have to configured
    - Ability to export security Events via the WEB browser has been added
  - ❑ 802.11a support
    - Wireless Hops stabilized
    - "Falcon like" master/station radio functionality
    - Station statistics
    - DFS – Dynamic Frequency Selection
    - Support for 905 (Japanese) country code (subject to regulatory approval)
  - ❑ Fixes since R1.80.02
    - Corrected problem with 802.11b radio where it would not consistently start properly at boot-up time.
    - Spectralink phones now work in R1.90 (in R1.80 the phones would only work with configuration set to 'data only').
    - Fast roaming works without a radio in the root.
    - Fixed retry logic for EAP-success and EAPOL-key messages with the 24XX family.
    - Lost Ethernet detection now works for WA21 and WA22 APs.
    - Secondary LAN…
  - ❑ AP Client Bridge Enhancements
    - Support for Wavelink's Avalanche Enabler
    - 802.1x Supplicant supports EAP-TTLS and EAP-TLS

Fixes

Fixes in R1.93

- 802.11b radio fix:
  - 802.11b radio would get into a state where it could not transmit frames. The client device shows a strong radio connection to its AP, and the client does appear in the AP Connections screen, but the client device cannot communicate to its host.
- RADIUS Server:
  - We had an issue with a RADIUS server that would sometimes respond from a different IP address than that to which a RADIUS request is sent. We added support to handle this situation.
- 802.11b station radio firmware upgrade:
  - We have upgraded the 802.11b station radio firmware to v8.75. This firmware does a better job at handling roaming when the AP is in 'station mode'.
- IP Tunnel fixes:
  - Microsoft VPN issue: Running with Microsoft VPN would not work. This has been fixed and was caused by our handling of GRE and Microsoft's use of GRE for their VPN solution.
  - Fix to allow APs on an IP Tunnel Secondary LAN to attach through the Designated Bridge rather than the IP Tunnel. This eliminates multiple APs forming IP Tunnels from the same Secondary LAN when they are configured for IGMP. This also allows backup DBs on the IP Tunnel to revert back to their connection through the primary DB when it comes back online (This was a reported field issue).
  - Fix to recognize a Designated Bridge (wireless or IP Tunnel) when bridge priorities are zero. This allows IP Tunnels to recognize a single Designated Bridge for the LAN. This issue was fairly serious since our default Secondary LAN Bridge Priority is zero and when multiple APs could become the Designated Bridge (wireless or IP Tunnel), this bug prevented proper negotiation.
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