RAM-9000 Cellular RTU Series
IndustrialPro™ Routers (SN and RAM Series)
EnterprisePro™ IP/V Routers (A/M/R D-Series)
Wireless Modems

Release Notes
Through Version 3.17 / 4.17

April 2014

CHANGE HISTORY

Version	Date	Description
3.17	April 21, 2014	Release 3.17
3.16	January 31, 2014	Release 3.16
3.14	July 2, 2013	Release 3.14 – Recommended Stable for EnterprisePro
3.13	December 20, 2012	Release 3.13
3.12	October 16, 2012	Release 3.12
3.11	June 22, 2012	Release 3.11
3.10	January 13, 2012	Release 3.10
3.09	June 24, 2011	Release 3.09
3.08	March 16, 2011	Release 3.08
3.07	January 11, 2011	Release 3.07
3.06	October 12, 2010	Release 3.06
3.05	October 5, 2010	Release 3.05
3.04	May 8, 2010	Release 3.04 – Pre Release

Note: Version 4.xx image filenames contain "g25" and are intended for LTE units only. Please refer to the Reflashing Guide for additional information.

Version	Date	Description
4.17	April 21, 2014	SN/RAM Release 4.17 – LTE / G25 / RAM9K
4.16	January 31, 2014	SN/RAM Release 4.16 – LTE / G25
4.15	Oct 16, 2013	SN/RAM Release 4.15 – LTE / G25 – Wired Router 6021 Only
4.14	July 2, 2013	SN/RAM Release 4.14 – LTE / G25
4.13	January 3, 2013	SN/RAM Release 4.13 – LTE / G25
4.01	November 30, 2012	SN/RAM Release 4.01 – LTE / G25
4.00	October 22, 2012	SN/RAM Release 4.00 – LTE / G25

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Sixnet Wireless Firmware Release 3.17 / 4.17

• Release Date: 04/21/2014

New Features

- Support for new RAM-9000 model types
- New I/O Control and Configuration pages.
- [MS-421] - Test I/O - Onboard IO button will easily load default registers.
- [MS-445] - Implement data usage logging, enabled by default. Status->Network->Traffic.
- [MS-583] - RS485 Support on Automation Configuration Screens (Modbus, DNP3, etc).
- [MS-623] - New User 'rlcuser' added for CLI/SDK.
- [MS-695] - IODB Perl Library for custom SDK Scripts (iodblib.pl/iomgr.pl).
- [WS-55] - USB Dev Access: Sixnet custom Windows driver no longer required. Standard RNDIS Network device for recognition on all platforms.

Improvements

- [MS-307] - Add GUI reconnect loop after reflash.
- [MS-484] - Syslog size now dynamic for units with more memory. 'slog' follows rotation.
- [MS-562] - Cleanup display of Traffic (vnstat) reports.
- [MS-567] - Update eth0/eth1 name to eth0(WAN) / eth1(LAN) for clarity across products.
- [MS-570] - Improve Firewall General Settings Configuration Screen Layout.
- [MS-591] - Improve SMS Sending error detection with MC8705.
- [MS-612] - Upgrade management of stale screen data - Color coding and warning messages when aged data is viewed.
- [MS-614] - Update Firewall to allow custom Redirect rules to apply before General Settings or Allow rules.
- [MS-615] - SVM Client: Current APN sent to server.
- [MS-616] - Unit status information is saved across reboots in /storage/
- [MS-642] - Perl xml_lib updated for RAM-9000 Extended IO.
- [MS-647] - Reflashing boot time improved by 1-2 minutes, depending on model.
- [MS-651] - Reflashing improvements, also bundled into an upgrade package for previous versions to improve performance and reliability during upgrades.
- [MS-652] - Add notice to user when recovering from XML config corruption to last good state.
- [MS-653] - SVM Client: Queued check-ins set to max of 25; Default check-in intervals lengthened.
- [MS-653] - SVM Client: Authorization error not treated like a connection error for alternate interval or switching to secondary.
- [MS-653] - SVM Client: Default mode changed to: Secondary, only if Primary unavailable.
- [MS-660] - New core GPS Engine, gpsd.
- [MS-681] - All I/O Config, Modbus, and Test I/O Screens have been normalized to one-based Modbus addressing.
- [MS-696] - IPTransparency will preserve configured aliases and static routes defined for alternate access methods.
- [MS-709] - Misc GUI Updates and Improvements in browser caching, display bugs, and presentation.
- [WS-50] - Serial IP: Dial IP option to handle '/' in AT Commands.
- [WS-53] - Serial IP: Dial IP option to handle X0 and X1 in AT Commands.

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Bugfixes

- [MS-611] - Access Settings page allowed invalid characters and didn't redirect properly between http and https.
- [MS-632] - Fixed: E362 Occasionally reports 0 for RSSI.
- [MS-637] - Fixed: Timesync error on tower connection.
- [MS-673] - Cellular Watrcher Script bug - MC8705/MC8790 special lockup case detected in 30 seconds, rather than 15 minutes.
- [MS-697] - Controlling cellular timesync option fixed across all chipsets.
- [MS-657] - Fixed GUI DHCP Server Setup page.
- [MS-649] - Fixed System Configuration Import of config.xml.
- [MS-677] - Fixed: Modbus I/O transfers could stop randomly if queued messages are out of sync.
- [MS-702] - Fixed: Import of ioctrl XML section would not properly startup RAM6K IO until 'Apply' was run.

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Sixnet Wireless Firmware Release 3.16 / 4.16

• Release Date: 01/31/2014

New Features

- New GUI available for all SN/RAM Products.
- DMP Release 0.2.1 part of WR package for RAM-6021.
- vnStat traffic monitor and data usage logger available in Expert Mode

Enhancements

- Firewall layout and help improved.
- IE8 Basic compatibility fixes
- Address Space Randomization enable for all cases. Improves security.
- IP Transparency will only bounce the Ethernet interface when a cellular IP change is detected.
- Default firewall MASQ rules updated for NAT+PAT support. Previously, specific private subnets were declared. The newer preferred method will use 0.0.0.0 to enable MASQ on all connections attempted. This improves cellular uptime when an internal network is misconfigured, and improves connection tracking across different dynamic cellular IPs for subsequent connections.
- Modbus default register locations for LONG (5000) and FLOAT (7000) types now matches Sixnet IPm defaults.
- Enhanced cellular chipset monitor – Additional tests to determine if a cellular subsystem is functioning properly.
- Additional Module provisioning information available (See Provisioning Tab)
- CSQ Historical Log expanded to contain more signal data at snapshots
- SIM Carrier codes read and decoded for better GUI display.
- VZW LTE Connection's netmask updated to /32.
- VZW LTE MTU now adjustable.
- Increased syslog storage to 3MB for LTE units.
- Ethernet switch - fixed port 5's always on LED. Affects SN/RAM-6721
- OpenSwan IPSEC on LTE units allows weak and no encryption options to be specified for backwards compatibility. Allows DH Group 1 to operate.
- Kernel NAND updates for more robust filesystem usage (3.16 only). Prevents "bootlock"
- Sprint 3G modules have Location reporting disabled. Reduces data usage. Affects SN/RAM-66xx-SP.
- DMP 0.2.1: N-Tron Devices supported for all functions: 708FX2, 708TX, 709FX, 710FX2, 711FX3, 716FX2, 716TX, 7012FX2, 7018FX2, 7018TX, 7026TX
- DMP 0.2.1: N-Tron Devices supported for all functions except downgrade: 708M12, 712FX4, 714FX6, 716M12, 7010TX, 7900, 7506GX2

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Bug Fixes

- Monitor added for rare USB line error that could require an early reset.
- VZW LTE Fallback to 3G reliability greatly improved.
- VZW LTE Time-sync could be off by UTC vs local time. Fixed.
- VZW LTE Module tower loss detection was delayed. Reconnection is faster.
- VZW LTE could report very inaccurate connection uptimes.
- VZW LTE could stop reporting signal strength on the front panel LED.
- RSSI and ECIO consistently reported as negative values across modules
- HSPA/LTE modules perform faster initial connect to towers after module lockup.
- SNMP could stop replying to certain IPs
- SNMP could report wrong ECIO values (abnormally high)
- Improved handling for MC8705 at boot time. Affects certain SN/RAM 68XX models only.
- Gatherstats/configs will capture openvpn information.
- Better handling for Wired Router factory reset defaults. Affects RAM-6021.

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Sixnet Wireless Firmware Release 4.15

• Release Date: 10/16/2013
• Targeted for RAM-6021 Wired Router only.

New Features

- New GUI Redesign.
- Previous GUI available through Classic View link.
- Addition of EZ Config Wizard.
- Updated Ethernet driver to support higher throughput.
- DMP N-Tron manager available.

Enhancements

- Improved reflashing for LTE and WR units, and larger image sizes.
- Modbus IO XFER mapping clarity improved. Long and Float types correctly displayed.
- Test IO screen has improved responsiveness.

Bug Fixes

- Onboard IO error of "STBUSCTL_GET_REG_ALLOC ioctl() failed" could be seen on some LTE (4.xx) units.
- SerialIP will reinitialize the serial port more aggressively to avoid locked serial incidents.
- Policy routing updated to avoid return path problems on local USB connections.

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Sixnet Wireless Firmware Release 3.14 / 4.14

• Release Date: 07/02/2013

New Features

- Analog In functions enabled for SN-67xx units.
- RAM units will not reboot for cellular subsystem restarts. This is now isolated.

Enhancements

- Additional chipset statistics available in cardstats display.
- Automation functions highlighted in separate menu.
- Updates to USB Reset procedure on R3000 family products.
- PPP Dial-on-Demand (DoD) noted in main status screen.

Bug Fixes

- DNP3 auto restart improvements.
- Modbus I/O Transfer default mode changed to Wait4Reply instead of RapidFire.
- SN-67xx model serial port errors resolved.
- SplitLan mode stability improvements for RAM-6621 and 6821
- SNMP response fixed for network info on NAT IP ranges.
- Non-specific NAT/MASQ entries will use no IP rather than 0.0.0.0 for source IP ranges. This will create dynamic rules, rather than static rules for Firewall Masquerading.
- PPPoE MTU fixed to follow changeable Ethernet MTU.
- JBM XML Lib fully updated for current features.
- GatherConfigs now includes the openvpn directory.

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Sixnet Wireless Firmware Release 3.13 / 4.13

• Release Date: 12/20/2012

New Features

- RAM Models: DNP3 Slave Support Added
- RAM Models: Firewall linkage to DNP3 listening socket added.
- RAM Models: New Digital Input counter option.

Enhancements

- RAM Models: Test I/O Screens updated with better column readability.
- Full SNMP MIB-II added for SN/RAM, updating limited MIB-II
- ECIO fields added for 67xx models, Verizon LTE (E362)
- Module temperature reporting added to cardstats values
- Reflashing method now scans for new NAND bad blocks before updating firmware.
- SixView Manager client now exchanges Unit XML Config file with SVM v2.2
- Boot time improved. Now 13% faster.

Aircard/RF Module Support

- MC7700 Support for Bell Mobility, AT&T, and Rogers

Bugfixes

- SNProxy - Fix for custom user generation.
- SNMP will no longer rewrite private IP octets, stalling snmpwalk operations in IPT mode.
- Restores udev boot speed improvements when reflashing from older versions and saving configs.
- 68xx-HSPA models reported 2G signal strength when in 3G service. Proper RSSI now reported.
- SerialIP UDP Broadcaster fix - return path IP could change based on sequence of recv packets.

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Sixnet Wireless Firmware Release 3.12

• Release Date: 10/16/2012

New Features

- RAM Models: WAN/LAN division on 6x21 models allow wired/cell WAN fail-over
- RAM Models: Test I/O Screens for monitoring and updating internal register variables.
- RAM Models: New Digital Input counter option.
- New model RAM-6021 supported for wired WAN/LAN routing and firewall.
- New firewall option: Ranged NAT 1-1 to provide large scale network remapping
- Multicast Routing supported with Expert mode options for mrouted, pimd, igmpproxy, and smcroute.
- SMS interface available for SDK applications (All models except 6400 series)
- SNProxy - webserver proxy to provide optimized HTTPS encapsulation to HTTP devices protected behind the firewall.
- Firewall FTP deep packet inspection available to dynamically coordinate a protected FTP Server.

Enhancements

- Improved GUI Speed with 10-50% improvements for most screens.
- Improved boot time speed for SN/RAM models.
- Improved Cellular statistics available with connected carrier PLMN ID (HSPA).
- DHCP Server Leases view to observe client's connected.
- DHCP Server MAC address fixed association now supported.
- Updated Zebra Advanced routing utilities to latest Quagga version 0.99.21
- Added Conntrack table display
- SNMP fields added for LTE Cellular options.

Aircard/RF Module Support

- MC8705 Support available for HSPA+ modules

Bugfixes

- Hardware flow control added to SerialIP options.
- Custom firewall rules appear immediately after a reflashing first bootup.
- RAM6K: HWIO Control for onboard Digital Out (DO) fixed.
- Fixed IPSec Server mode, when setup without Peer IDs would not match PSK.
- Fixed R3120 Wifi Open Network mode (no encryption option).
- Deleting a firewall ACL Whitelist while still assigned will revert to the default ACL.
- Improved handling of internal module detection, if USB host is out of sync at boot time.

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Sixnet Wireless Firmware Release 3.11

• Release Date: 6/22/2012

Release Summary

- I/O ports integrated for RAM usage with Modbus and SDK (BT-6000)
- DHCP Relay capabilities added
- GRE Tunnel limit now 99
- DVR Capture code (TransSniff) integrated into GUI
- Serial IP now has UDP Broadcaster (Multi-Unicast).
- Added PMTU control and MTU settings per interface.
- Added detailed switch status information (BT-6x21)
- Modbus I/O Transfer update interval maximum increased to 9999 seconds.
- DHCP Server can target specific IPs to specific MAC Addresses
- Default SVM Client check-in interval 6hrs, and error retry at 4hrs.
- SDK Interface and methods improved

Aircard Support

- Verizon LTE 4G, Novatel USB551L (Improved)
- T-Mobile ZTE Rocket 4G
- AT&T LTE - Momentum 4G (Sierra 313U)
- Bell LTE - Turbo Stick 4G (Ovation U679)
- Rogers LTE - Rocket Stick 4G (Sierra 330U)
- Telus LTE - Ovation MC679 4G

Bugfixes

- SN/RAM-68xx, Driver upgrade. Improves occasional small packet loss.
- R3000 would occasionally fail to start reflashing. ROM detection more reliable.
- SerialIP (gwlnx) UDP Header bug fixed.
- SerialIP display of IP/Ports corrected for "2Way" mode.
- OpenVPN clears connection tracking correctly
- Fixed - Certificate Manager could lose SSL certs when upgrading firmware.
- Fixed - RAM-6000 could corrupt firewall when upgrading from 3.09 to 3.10.
- Cellular CURRENT_RSSI reported uniformly across additional aircards for SNMP reporting.
- Fixed - Modbus Remote Stations did not display correctly over 8 entries.
- Fixed - Modbus serial port usage could collide with SerialIP usage of same port.
- Fixed - VRRP Interval parameter now setup properly.
- Improved browser display of Cellular Provisioning pages.
- Fixed - %any usage in IPsec PSK for VPN Server mode.

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Sixnet Wireless Firmware Release 3.10

• Release Date: 1/13/2012

Release Summary

- Openssh 5.9p1 security update
- Improved GUI load times
- Improved Config Import performance and operation
- Improved Firewall loading and applying performance
- DHCP Lease status available in Expert Mode
- Ping Alive supports multiple hosts in Expert Mode
- Expanded GRE tunnel support to 99 tunnels
- Added support for MC5728 EVDO modules, Verizon and Sprint
- Improved handling of SIM unlock PINs
- Added DHCP-Relay capabilities
- Added support for embedded Novatel LTE E362 Verizon module

Modbus

- Integrated Modbus listening port into firewall options
- Improved Register address display in IO Transfers
- Fixed wrong labels for Discrete Input and Discrete Output
- Default Send Mode for RS232 is now Wait4Reply
- RS232 Mode fixed and uses LED correctly
- Improved expert mode handling of .xml files

Serial IP

- GUI support for integrated configuration of all options
- Full serial port support for 2-wire to full RS-232 signaling
- Optional AT Command interpretation for Modem Emulation
- AT Commands support "dialing" an IP address/port
- Supports fixed size packets of serial data stream to IP packets
- Network connections support TCP and UDP
- TCP Server and Client modes supported
- Broadcasting supported to multiple network endpoints (TCP and UDP)
- Multi-mode support for simultaneous TCP Server and Client

Aircard Support for:

- Verizon LTE 4G, Novatel USB551L
- T-Mobile, Jet 2.0 (Huawei E182E)
- Generic HSPA/Claro, ZTE MF626
- Generic HSPA, Nokia CS-18

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- Generic HSPA, Sierra Wireless 310U, 312U and 320U

Bugfixes ¶

- Upgraded DHCP Client for SN/RAM functionality
- CLI User for Modbus fixed after upgrading firmware
- Fixed sporadic blank page in Sprint Provisioning page
- Fixed firewall duplicate whitelist entries
- Fixed firewall handling of ICMP packets on IPSec interfaces
- Fixed early reboot with misconfigured SIM settings
- Fixed RS232 front panel LED display when UART in use
- Fixed IPSec Aggressive mode
- Fixed allowing longer passwords for user accounts
- Added reset of conntrack tables on OpenVPN connection start/stop
- Fixed SIM usage for newer SIMs on SN/RAM-64xx series
- Changed USB Network mode to disable default gateway

Sixnet Wireless Firmware Release 3.09

• Release Date: 6/24/2011

Release Summary

- Added support for ModBus protocol (RAM edition only)
- Added IODB kernel module for storage of register information (Industrial Pro Plus Only)
- Added Command Line Interface for ModBus Configuration (Industrial Pro Plus Only)
- Added Base Station ID and GPS Lat/Long coordinates to Sixview Manager Check-In information
- Added Support for SN/BT units push button reset to factory default, if held for 3 sec. on power-up.
- Added leftsourceip option to IPsec tunnels.
- Updated contact information on Web Interface
- Updated OpenSSL Libraries to latest version 0.9.8r
- Optimized Web Interface to decrease GUI page load times
- Lightbar v1.45 - fix for Wireless DoD mode (double strobe)
- Added integration between gwlnx protocol converter and GUI engine to improve screen load times.
- Updated Status screen display for IP Transparency mode
- Added Private IP option to IP Transparency mode to pass more local addresses to the world.
- Added vsftp to expert mode
- Added ntpd to expert mode
- Updated OpenVPN to v2.1.4
- Changed default SixViewManager ports from 48080 to 18080
- Changed default SixViewManager servers to server1.sixviewmanager.com/server2.sixviewmanager.com
- Added Status screen display of wireless/cellular uptime.

- Detection Support for the Vodafone/Huawei K4505 GSM cellular modem

Bugfixes

- Corrected IPSEC configuration of "Road Warrior Mode" to function properly when Remote IP address is empty/unknown
- Fixed firewall parsing of Filter Rules section to allow multiple filters on a interface pair.
- Fixed firewall General Setting IPsec Allow option to allow IPsec interfaces to be untrusted/external interfaces.
- Fixed firewall IPsec option to allow Filter Rules to restrict traffic on internal IPsec connections.
- Fixed OOB raw mode to ignore all combinations with ~ chars during TCP mode.
- System Startup date will be Jan 1, 2011 if clock is before 2011.

Sixnet Wireless Firmware Release 3.08

• Release Date: 3/16/2011

Release Summary

- Added robust connectivity handling for SixView Manager client
- Added user-level support for rewriting U-Boot environmental variables
- Additional SNMP variables for GSM carriers
- Optimized cron to handle date changes
- Added SNTP server support
- Added VSFTP for SDK use
- Updated DNS to allow more than one search host
- Added support for Sierra MC5725 provisioning
- Added support for Bell Mobility MC5727/MC5728 provisioning
- Added support for Cellcom MC5728 provisioning
- Added VRRP Status file for runtime statistics
- Added support for Cellular Roaming control from GAU
- Added GSM Provisioning capability to GAU, displays additional information
- Optimized support for Remote Reflashing for all models

- Added support for new aircards
  - AT&T USBConnect Shockwave HSPA+ USB modem
  - Verizon Pantech UML290 4G LTE USB modem (beta)

Bugfixes
- OpenSwan Ipsec Nat-T loop bug
- IPtrans's DHCPD fails when DHCPD already running
- IPSEC routes get out of order when default interface is reconfigured
- Fix jbmupdate gatherconfigs import behavior
- Modify PowerDownCellModem.pl to not kill all pppd processes
- IPIP tunnel page bugs
- Repaired GAU Menu option to include USB Port network configuration

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Sixnet Wireless Firmware Release 3.07

• Release Date: 1/11/2011

Release Summary

- Support for SN/BT-64xx models
- Improved support and help info for flashing low memory (32Meg BT) units, particularly through the GUI
- New modems supported:
  - Franklin U600
  - Improved ZTE MF668 support
  - Cinterion MC75
- IPSec VPN Server mode support
- IPSec VPN X.509 Certificate support
- SIM PIN Unlock support
- GSM/HSPA International RF Band selection
- IP Transparency Router Mode - Provides advanced routing features while presenting simple configuration for connected devices
- Additional Sixnet rebranding changes
- Ping Alive - Supports new options for connection testing

Bugfixes

- Fixed various GUI reflashing problems with low memory units
- rxidle value changed back to 150 from 0 in previous release
- DNSMasq updated to latest version which solves some DNS resolution problems
- CDC/ACM detection error solved which was preventing the device from recognized certain modems on boot up
- VRRP Screen - handle multiple VRRP instances much better
- Network Interface VLAN settings simplified and streamlined

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Sixnet Wireless Firmware Release 3.06

- Release Date: 10/12/2010

Release Summary

- Improved support and help info for flashing low memory (32Meg BT) units, particularly through the GUI
- Improved support for preserving unit configuration across reflashing
- Improved provisioning support:
  o Added SIP option for Sprint and Verizon, required for Sprint LAC/LNS support.
  o Provisioning screen now updates page with progress of provisioning process and module status
  o Added Sprint datalink provisioning support for 250U (3G mode only).

Bugfixes

- Fixed GUI reflashing problems with v3.05
- Fixed GUI Display issue for Verizon provisioning screen
- This release replaces v3.05

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Sixnet Wireless Firmware Release 3.05

- Release Date: 10/05/2010

Release Summary

- New aircards/modules supported:
  - o Sierra USB 308
  - o Sierra Aircard 503
- Sierra 250U (3G support only)
  - o ZTE MF668
  - o ZTE K3805-Z
  - o Option GlobeTrotter HSUPA
  - o Option ICON 542
  - o LG USB Connect Turbo
  - o Pantech UMW190
  - o http://sixnet.com/content/aircard-86.cfm for a complete list
- OpenSSL updated to version 0.9.8o, which fixes multiple security issues in previous versions
- Significantly improved bootup times due to modification to hotplug
- Smaller firmware image size
  - o Removed DHCP Relay.
- Support for PRL information in SixView Manager client updates
- Support for restoring a device configuration after a firmware update
- Supports firmware updates through SixView Manager
- New "Router Mode" option for IP transparency
  - o Will route traffic to the cellular network, bypassing NAT/PAT.
  - o Used with SIP mode for Sprint LAC/LNS
- Support for many VRRP instances (up to 10)
- IPSec now supports X.509 certificate
- VLAN configuration supported through GUI interface
- Default RxIdle changed to 0 to disable feature by default
- TCP Socket test added to Status options screen (uses telnet to probe remote ports)

Bugfixes

- Firewall configuration for Filter Rules fixed
- Connection Tracking bug found with gianfar ethernet driver on D-Series
- IP Fallback improvements to prevent leaking packets after switching interfaces.

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Sixnet Wireless Firmware Release 3.04

- Release Date: 7/19/2010

Release Summary

- New aircards/modules supported:
  - o Sierra 888 Compass GSM
  - o Sierra MC5725 embedded EVDO module
  - o Sierra USB 306 (Telus)
  - o Sierra USB 305 Lightning
  - o Huawai USB E182 GSM
  - o Huawai USB E168C CDMA
  - o C-motech (Franklin Wireless) Sprint U301 (3G mode only)

- Greatly improved support for VLAN configurations
- Adds serial TTY support for SN (BlueTree) models
- Adds firewall whitelisting support
- Adds support for Wifi models
- Adds support for USB ethernet device to SN (BlueTree) models
- Adds support for restoring device configuration after firmware upgrade
- Adds support for D005 4-port RS232 daughtercard
- Adds new "routing mode" option to IP transparency
- Adds SIP support for Sierra Sprint Aircards - Sprint LAC/LNS support
- Adds support for running muiltiple instances of VRRPd
- Adds support for user access controls in the GAU
- Adds ECIO value reporting for Novatel modems
- GAU interface rebranded with Sixnet colors and logos

Bugfixes

- Fixed OpenSWAN bug: "waiting for ppp0 to become free. Usage count = -1"
- Fixed firewall redirect rules for local redirect
- Fixed GAU bug preventing entry of illegal XML characters (in password fields).

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