Release Notes

Digi TransPort Product Range

Version 5143 (Bootloader 6.48)

January 13, 2012

INTRODUCTION

This is a production release of firmware for the Digi Transport product range.

The Digi TransPort WR21 is a full featured, cellular router offering the flexibility to scale from basic connectivity applications to enterprise class routing and security solutions. The WR21 is designed for Wide Area Network connectivity including 2.5G/3G/4G networks and beyond.

The Digi TransPort WR41 and WR44 are enterprise class cellular routers that provide secure high speed wireless connectivity to remote sites and devices for primary and backup wireless broadband network connectivity. The multifunction routers feature a flexible design, allowing users to choose from a variety of configurations including multiple serial ports (async/sync), GPS, GPS/CAN/I/O, Wi-Fi or telemetry modules, in addition to standard features like USB, serial and Ethernet interfaces.

The Digi TransPort WR44R is a rugged, all-in-one 3G/4G mobile communications solution with true enterprise class routing, security and firewall. Featuring a heavy-duty case aluminium enclosure, the Digi TransPort WR44R offers a flexible interface design with an optional integrated Wi-Fi access point (with multi SSID), USB, serial and 4-port Ethernet switch, as well as a variety of configuration options including multiple serial ports (async or sync), GPS, GPS/CAN/IO or I/O only modules.

The Digi TransPort DR64 is a DSL cellular router that provides high speed wireless connectivity to remote sites and devices for primary or backup wireless broadband wireless broadband network connectivity.

The Digi TransPort VC74 is an enterprise class VPN concentrator that provides secure end-to-end connectivity for large numbers of remote devices and networks. Fully compatible with all Digi VPN enabled cellular and wired routers; a centralized Digi TransPort VC7400 enables a fully integrated, single vendor solution with the highest level of reliability and security.

SUPPORTED PRODUCTS

Digi TransPort WR21
Digi TransPort WR41
Digi TransPort WR44
Digi TransPort WR44R
Digi TransPort DR64
Digi TransPort VC7400

SUPPORTED CELLULAR MODEMS

Within the TransPort product family, Digi has continued to add support for cellular modules as vendors make updates and improvements to support the latest chipsets and cellular technology. As new modules come on the market and older ones go obsolete, Digi is committed to supporting the products we have sold and continue to sell to our customers. The level of support that we are able to provide falls into one of the following categories:

1. FULL SUPPORT

These modules are shipping in Digi products. An essential part of our product testing is to make sure these modules are compatible and function properly. Operational and performance issues with these modules that are found by customers will be verified, scoped and scheduled to be fixed in an upcoming firmware release.

C-motech

CNE680	Revision IDs: 68SWE-14 [Jun 08 2009 20:53:19] CNU68PT [Nov 16 2009 05:10:52]

Sierra Wireless

MC5727	Modem Revision: p2410701,51240 [Nov 08 2007] BOOT: SWI6800V2_PP.01.07.01 2007/11/08 APPL: SWI6800V2_PP.01.07.01 2007/11/08

Ericsson

F3307	Revision ID: R2A11
F3507g	Revision ID: R1D06
F5521gw	Revision ID: R2A07
F5321gw	Revision ID: R1C08

Option Wireless

GTM380	Revision IDs: 2.8.0Hd (Date: Oct 11 2007, Time: 10:20:29) 2.9.1Hd (Date: Dec 17 2007, Time: 16:00:17) 2.12.0Hd (Date: May 27 2008, Time: 11:19:10)

Qualcomm GOBI 2000

Sprint	Revision ID: D1055-STUTCSFD-3702 1 [May 25 2009 12:00:00]
Verizon	Revision ID: D1055-STUTDSVD-3574 1 [Apr 12 2009 21:00:00]
Generic HSPA	Revision ID: D1025-STUTABGD-3574 1 [Apr 07 2009 19:00:00]

Huawei

EM680	Generic UMTS: D3200-STSUGN-1575 1 [Nov 22 2010 09:00:00] Verizon: D3600-STSUVH-1576 1 [Nov 23 2010 16:00:00] Sprint: D3600-STSUSH-1576 1 [Nov 23 2010 16:00:00]

Cinterion

MC75i	Revision 01.100

Fusion Wireless

  FW2763P   Revision: 8.5.16

2. PARTIAL SUPPORT

These modules had shipped in Digi products in the past but are no longer actively supported by the module vendor. Firmware testing no longer includes these modules, however every attempt is made to maintain support as features and improvements are implemented. Issues with these modules that are found by customers will be verified, scoped and either scheduled to be fixed or a newer, supported module offered as an upgrade option.

Option Wireless

  GTM 378   Revision IDs:
                  2.4.2Hd (Date: Aug 24 2007, Time: 14:27:26)
                  2.5.7Hd (Date: Jan 11 2008, Time: 11:18:56)
                  2.5.10Hd (Date: Feb 04 2008, Time: 14:25:03)
                  2.5.13Hd (Date: Feb 18 2008, Time: 18:31:16)
                  2.5.23Hd (Date: Nov 03 2008, Time: 10:21:08)
  GTM 382   Revision IDs:
                  1.4.6.0Hd (Date: Oct 1 2008, Time: 11:50:07)
                  1.8.0.0Hd (Date: Jan 14 2009, Time: 14:46:50)
                  1.9.1.0Hd (Date: Mar 26 2009, Time: 09:10:10)
                  2.9.4.13Hd (Date: Nov 23 2009, Time: 09:40:55)

Motorola

  G24-L
  G24-EQ

Cinterion

  MC55i
  TC63i

Sierra Wireless

  MC5725   p2005001,20224 [Sep 21 2006 15:43:22],, VID: PID:
  MC8755   Revision IDs:
                  U1_1_9MCAP G:/WORKSPACES/FIRMWARE/U1_1_9MCAP/MSM6275/SRC
                  2006/04/04 21:50:28
                  U1_2_44MCAP G:/WS/FW/U1_2_44MCAP/MSM6275/SRC 2006/09/27
                  17:24:51
  MC8780
  MC8790   Revision ID:
                   K1_0_2_8AP C:/WS/FW/K1_0_2_8AP/MSM6290/SRC 2008/09/17

Novatel

  EU740
  EU870D

3. LIMITED SUPPORT

These modules have never shipped in Digi TransPort products and have never been part of firmware testing and verification efforts. These modules may be similar to full/partially supported modules by the same vendor and may even have been informally tested and shown to work in Digi products. Operational and performance issues with these modules that are found by customers will be evaluated and scoped to be fixed on a business case basis.

Ericsson
    F3607gw   Revision ID: R1G08

Huawei
EM660	Revision ID: 11.102.11.06.000
EM770W	Revision ID: 11.128.03.00.00
EM820W	Revision ID: 11.810.09.05.00

4. NOT SUPPORTED

These modules have never shipped in Digi TransPort products and are known to be incompatible.

None

SUPPORTED WIMAX MODULES
GCT / Quanta Microsystems, Inc.:
    WM553

HIGHLIGHTED PRODUCT CHANGES
Starting with the firmware version 5140, the changes described in this section are incorporated in these products. Please refer to the HISTORY section of these release notes to identify the specific revision in which these changes were introduced.

1. **IDIGI MANAGER PRO SUPPORT**
   The iDigi Manager Pro allows the user to remotely configure and manage the Digi TransPort product via the iDigi service.
   See www.idigi.com for more information on iDigi.

2. **PYTHON SUPPORT FOR WR41/44 CARDS**
   The WR41/44 cards are now fully supported by the digihw Python module.

ENHANCEMENTS

1. **Serial number support in SNMP Community configuration**
   Added support for %s in the SNMP Community configuration which gets translated to the Serial number.

2. **WR21 Ethernet Auto negotiation and Duplex**
   Added support for auto-negotiation and duplex options for the WR21.

3. **EC/IO support for GOBI3000 WCDMA mode**
   Added EC/IO support to the modemstat response for GOBI 3000 WCDMA mode.

4. **IP Passthrough parameter "lease" added**
   Added new IP Passthrough parameter "lease" which allows the user to specify the DHCP lease time to use when in IP Passthrough mode. The default value is 180 seconds.

5. **Firmware update (FUMO) for Fusion CDMA modules**
   Added firmware update support for the Fusion CDMA modules.

6. **DNS redirect support for Wi-Fi hotspots**
   Added support for DNS redirect for Wi-Fi hotspot mode so that DNS queries are intercepted and the IP address of the Wi-Fi device is returned to the requester so that the hotspot splash page is displayed.

7. **SNTP support to inhibit interface**
   SNTP now supports the same two parameters "inhibit_int" and "inhibit_add" as supported by NTP. When configured, SNTP will not attempt to update until the specified interface is connected.

8. **DHCP client parameter "idismac" added**
   Added new DHCP client parameter "idismac". When turned on, the MAC address of the Ethernet interface is used as the client ID. When off (default). The unit behaves as before where the ID is based upon the serial number and Ethernet interface number.

BUG FIXES

1. Fix to WR21 Ethernet so that it can operate at 10Mbps.

2. Fix for problem with the Dynamic DNS web page where the setting for the default interface was not working correctly.

3. Fix for the RCI descriptor for the "do_command target="file_system" which was giving an invalid response. (Vantive 40770)

4. Fix so that configuration changes made via iDigi are logged in the Event log (Vantive 40991)

5. Fix so that PPP statistics are correctly displayed via iDigi (Vantive 41017)

6. Fix for iDigi where an invalid XML response could be returned by the unit (Vantive 41272)

7. Fix to allow files that contain "priv" in their name but do not start with "priv" to be accessed via iDigi. (Vantive 41388)

8. Fix for the RCI MAC filtering configuration that would reject configuration of 12 characters (Vantive 41392)

9. Fix for the RCI vlan configuration so that invalid configuration is rejected (Vantive 41393)

10. Fix for the RCI Wi-Fi country configuration so that invalid configuration is rejected (Vantive 41395)

11. Fix for the RCI wifinode sharedkey setting where to a too large value could cause the unit to reboot or other settings to become corrupted (Vantive 41411)

12. Fix for the RCI definition of the modemcc asy_add parameter (Vantive 41416)

13. Fix for the iDigi filesystem put_file request (Vantives 40772 and 41468)

14. Fix for the RCI setting of the modemcc check_reg parameter which was only accepting one of its three possible values (Vantive 41506)

15. Corrected RCI descriptors that were using type 'char'. They now have type 'uint32' (Vantive 41514)

KNOWN ISSUES
1. On the Digi TransPort DR64, the Export/Import feature on iDigi Manager Pro will not work.

DOCUMENTATION ERRATA
None.

ADDITIONAL INFORMATION
It is recommended that you perform a backup of your device's settings prior to upgrading your firmware. If you should need to revert back to a previous version of firmware, this will ensure that you will be able to restore your device to its previous settings in the event that some settings are not restored properly after downgrading the firmware.

To backup your device settings, follow this simple procedure:
1. Open the web user interface and navigate to the "Administration" section and select "Backup/Restore".
2. Select the parts of the devices' settings that you wish to backup.
3. Click the "Backup" button and select the location to where you want to save your backup file.

To restore:
1. Navigate to the same section within the web UI.
2. Click the "Browse" button to select the backup file you saved in the previous steps.
3. Click the "Restore" button to upload the configuration settings contained in your backup file.

HISTORY

5142 (Bootloader 6.45) – December 2, 2011

ENHANCEMENTS
1. Added support for the Telemetry2 card to the Python digihw module.

2. Added GPS SNR support to the at\mibs=gps command. This now reports the SNR for up to 8 satellites.

3. Added support for CDMA signal quality info (RSSI, EC/IO) for the Huawei EM680 module.

4. Support for Modbus TCP to Serial mode added.

5. The number of NAT entries supported on the WR21, WR41 and WR44 has been increased from 250 to 4000.

6. VRRP was updated to allow the VRRP priority to be adjusted according to the status of another VRRP instance.

BUG FIXES
1. Fix for the WR41 firmware upgrade via Web GUI and iDigi for when there is not enough flash space. The main image is now overwritten directly rather than a temporary copy being created.

2. Fix for iDigi configuration handling which will reject a configuration request if the given string value is too long for the parameter.

3. Fix for file download via iDigi where it would hang if there wasn't enough flash space to store the file. The unit will now return a "Memory Error" if there is not enough flash space to store the file.

4. Modemcc parameters "psys" and "psys_2" settings now work on Ericsson modules.

5. Fix for iDigi <attr> tags to report the correct type.

6. SNMP fix for a snmpwalk operation that failed with a non-incrementing OID.

7. SNMP fix for where the unit would report the wrong number of interfaces if SYNC option was disabled.

8. Fix to SNMP settings on the Web GUI Network Services page.

5141 (Bootloader 6.37) – November 4, 2011

ENHANCEMENTS
1. Support for NHRP (Dynamic VPN) added to WR21 Enterprise mode.

2. Support for RCI over HTTP added. It can be enabled or disabled via the Web GUI Network Services page or by the new command "cmd 0 rcihttp <on|off>".

3. Python digihw GPIO support added for the Telemetry1 and Telemetry2 cards. Also Python digihw temperature and voltage monitor support added for the Telemetry1 card.

BUG FIXES
1. Fix to firewall recovery. When using a list of destination IP addresses with recovery, it was possible for the current index into the list table to be reset to the start before the other entries in the table had been tried.

2. Fix to Web GUI firmware update in which an "already underway" error occurs. It was caused by the web page requesting the status too soon, sometimes before the upload header has been sent. This most likely to be seen when downloading a large ZIP file (e.g. containing a GOBI file).

3. PAD fix to ensure a new call is not started until the previous call has been confirmed as cleared.

4. Fix for command filtering bug.

5. Fix for IPsec Tunnel Web GUI bug were the checkbox for "link tunnel with interface" was left unchecked when the parameter was configured.

6. Removed duplicate "transip" entry in the CLI command table.

5140 (Bootloader 6.23) - October 21, 2011

ENHANCEMENTS
1. Added support for iDigi Manager Pro which allows the user to remotely configure and manage the Digi TransPort product via the iDigi service.

2. The digihw Python module updated to include support for GPS interfaces.

3. Added serial numbers to configuration tag support so that tags can be used to create device specific configuration based on the serial number.

4. Added a new POTS parameter "pots 0 connect_secs x" to define the maximum number of seconds to wait for the modem to connect.

BUG FIXES
1. Fix to VRF problem when routing from one VRF to another.

2. Fix to X25 switch so that if an answering XOT does NOT indicate any P or W facilities we ASSUME that whatever we asked for has been accepted.

5139 (Bootloader 6.32) - October 07, 2011

ENHANCEMENTS
1. Support for WR21 released.

2. Added 3G service LED support to the WR44. It will now use the Serial DTE LED if the ASY LED mode is set to "Connection" on the WEB GUI. The CLI command is "cmd 0 asyled_mode 0".

3. Added access to the DR64 motherboard temperature via the SNMP Sarian-Monitor MIB.

4. Added support for ftime into Python so that fractional portion of seconds (10ms granularity) is returned with calls to time.time().

BUG FIXES
1. Fix for GP UDP sockets that weren't closing down due to inactivity correctly and after receiving ICMP unreachable messages.

5138 (Bootloader 6.29) - September 24, 2011

ENHANCEMENTS
1. WiMAX support added to WR41, WR44 and WR44R.

BUG FIXES

1. Fix for problem with WEB pages not showing Ethernet interfaces in the menu when configured for WiMAX or Wi-Fi client.

2. Fix for problem where Serial port goes dead after configuring PPP away from a SYNC port.

3. Fix an OSPF problem where a local default route was being replace by a learnt default route when the local default route went OOS but then being ignored when it came back into service.

5137 (Bootloader 6.29) - September 15, 2011

ENHANCEMENTS

1. Added support for NHRP for WR41 and WR44.

BUG FIXES

1. Fix for IKE OpenSWAN interoperability problem.

2. Fix for lockup problem with EDGE (Cinterion MC75i) modules which could lock up when using a GTech SIM card. The modemcc sms_interval setting is now used to control whether or not to attempt SMS storage initialization

3. Fix to WEB GUI so that logical Ethernet interface now only displayed if we have logical Ethernet interfaces.

4. Fix to Ericsson module power cycle logic to reduce the overall power cycle times.

5. GOBI carrier wizard no longer sets the Verizon username and password.

6. Fix for IKE problem to correct event log entry when SAs expire.

7. Fix to DTR status on the VC7400.

8. Fix to WEB GUI so that the Wi-Fi parameters "Hide SSID" and "Enable Station Isolation" are only displayed when in Access Point mode.

9. Fix to WEB GUI to submit changes to the Sync interface parameters correctly.

10. Fix for VPN negotiation problem with OpenSWAN relating to IP protocol/port matching.

11. Update to SDRAM timings on the DR64 mk2 platforms.

5134 (Bootloader 6.24) - September 01, 2011

ENHANCEMENTS
1. Added support GOBI 3000 module.

2. Added EAP-TLS support for Wi-Fi client mode. Two new parameters "identity" and "sslcli_add" have been created. "identity" is the identity delivered to the EAP authentication server. "sslcli_add" indicates which SSL client configuration to use.

3. Update to the Wi-Fi 4 way handshake so that we don't send the PMKID KDE which seems to break some Wi-Fi client implementations.

4. GPS task no longer reconfigures the baud rate at start-up on the WR44. This reduces the delay before getting the first data from the GPS receiver.

5. Changes to WEB GUI so that it is more obvious that it is possible to edit the field for input combo-boxes.

BUG FIXES
1. Fix for Fleet card issue where after a daughtercard reset, the revision would sometimes be reported as "unknown" and CAN/J1708 messages could take a while to get synchronized.

2. Fix to WEB GUI Wi-Fi page for the "Identity" parameter which wasn't being set properly.

3. Fix for problem with loading the Python Quick Start wizard which resulted in Python running out of memory and/or threads.

4. Fix for the gprsRegistered MIB object so that it is set for the GOBI CDMA mode.

5. Fix for NAT on OpenVPN interfaces. Received packets that should have had their destination addresses translated were not being modified.

6. Fix for issue in the RADIUS client where the local session ID counter is stored as a 16 bit value but is matched against an 8 bit value in response packets. This meant that after the first 256 packets, RADIUS was unable to match packets.

7. Fix a WEB GUI backup problem when using IE8.

8. Fix for BGP which would crash if enabled and no configuration file is configured.

9. Fix for Firewall/Routing code where packets needing to be directed to a gateway configured in a static route were actually being directed to the interface's default gateway. This bug applied to outbound packets matching an inbound stateful inspection rule.

10. Fix for WEB GUI OSPF and BGP configuration editor page which wasn't saving the files correctly.

11. Fix for a PPP issue when a PPP interface configured to automatically connect using a SYNC interface wouldn't reconnect.

5132 (Bootloader 6.06) - July 20, 2011

ENHANCEMENTS
1. Update to WEB GUI IPsec configuration page.

2. On the WR41, the power for Ericsson modules is now held off for an additional 40 seconds after boot-up. For the Ericsson F5521 module, the power is held off for an additional 35 seconds. This is to work around a problem of a very slow voltage discharge on the WR41.

3. Add support for SNMP Informs.

4. SCEP change so that the certificate basic constraints field is checked when deciding which prefix to give the filename.

5. Increased the maximum length of the RADIUS username parameter from 20 to 80 characters.

6. Updates to the FTDI USB serial driver to support more devices and to fix issues with flow control and DTR.

BUG FIXES
1. Fix for the WEB GUI IKE/IKEv2 Responder page layout.

2. Fix to WEB GUI GRE tunnels page to clear the Source interface if the source IP address is configured.

3. Fix for problem when updating firmware using the WEB GUI which could result in excessive FLASH space being used.

5131 (Bootloader 6.20) - June 17, 2011

ENHANCEMENTS
1. QoS changes
   a. Queue rate limits are adjusted more promptly when other queues allow it.

b. If a queue's min and max speed settings are the same, the estimated link speed does not factor into whether or not that queue can send packets.

2. Support for %s (serial number) format specifier added into DynDNS hostname parameters.

3. Change to Web GUI Date and Time page to split the SNTP and NTP configuration.

BUG FIXES
1. RealPort fixes
   a. Fix for RealPort software flow control.

   b. Fix for RealPort watchdog that could sometimes happen with big buffers.

   c. Fix to ensure the Serial port is closed when a persistent close is received.

   d. Fix for a problem where the TransPort would sometimes send back a Persistent Open response to an Immediate Open request if the previous Open request was a Persistent Open.

2. Fix to ensure the configuration timer is stopped when a port is closed.

5130 (Bootloader 6.06) - June 02, 2011

ENHANCEMENTS
1. QoS changes to add support for estimating the interface speed. Previously, automatic adjustments of queue throughput setpoints would only work if the link speed was configured into the QoS context.

BUG FIXES
1. Fix for Ericsson F5521 module so that we now support firmware R2A07 and correctly handle automatic firmware configuration switching.

2. Changes to WEB GUI PPP status pages to display status information correctly.

3. Fix to RealPort which would stop a Linux client from sending more than 256 characters on the RealPort port.

4. Fix to SSL client to offload some of the SSL exchange work to a lower priority task. This resolved an issue where certain certificates resulted in an unusually large amount of processing and causing the DR64 platforms to have a watchdog reset.

Release notes for firmware versions prior to 5130 are available on request via email to
support.wizards@digi.com