360-80 E1 Channel Bank RELEASE NOTES

Covers the Charles Industries Ltd. 360-80 system E1 modules except for the 3641-80 and 3648-80 Routers

System CD Features:

Revisions and Manuals
- Module Installation document/manuals
- Module Practice documentation/manuals
- E1 Controller User's guide documentation/manuals
- This release note - replaces Trouble Shooting Manual

Current Version of E1 Controller (91-360381-X) Software Release: V1.3R/V2

Features in latest Software Releases:

All module provisioning using the craft port will display the current provisioning and will only change the provisioning as directed and will not revert any non-modified provisioning to factory default.

E1 Controller software update can be done by following the update procedure under the router section of this CD.

Operational Notes and Workarounds for the 360-80 System:

1. E1 Controller (3603) / Secondary E1 (3608) - Cabling - The RJ-45 cable that goes from the E1 primary (RT1) to the secondary unit RJ-45 (P2) needs to be a crossover cable for bypass function to work properly. Meaning pin 1 to 5, 2 to 4, 4 to 2, and 5 to 1. It is possible to set up a D/I application with no alarms but have alarms when the system goes into bypass. **Without the Cross-Over Cable the Symptoms are**: If the system is working correctly in all directions with ESF framing, then force a bypass on the secondary. The bypass LED comes on and then the AR and AY alarms come on which is OK, but then the AR and AY LEDs also come on at both the east and west channel banks. Swapping the transmit and receive pairs on the E1 cable at the east bank (XMT to RCV and RCV to XMT), then the system is in sync between east and west banks. Removing the forced bypass, the D&RI system has alarms because of the swapped pairs on the east E1 cable.
2. Secondary T1 (3608) - Timing - When configured in a drop and reinsert configuration, D&RI shelf must be set for loop time. If the D&RI shelf is set for internal timing (it's default setting), then the signaling gets corrupted going to/from west to east (no drop at D&RI) due to timing slips and causes flicker of the LEDs and broken audio on the voice cards in all directions.
3. E1 Controller (3603) / Voice Units -
   - Half size E&M, FXO & FXS - The tone test (beep) isn't available on the SNMP interface.
   - Full size E&M, FXO & FXS - Enabling the tone test for 1 channel will block test availability to all other channels
4. E1 Controller (3603) / 64xN (3634) - Loopbacks - When doing a remote loopback using SNMP for provisioning, the local 64xN card must have the PRTS option enabled to send the remote loopback and PRTS option must be enabled at the remote unit to respond to the loopback.

5. E1 Controller (3603) / 64xN (3634) - Loopbacks - With the V.54 loopbacks enabled, using the local loopback on circuit 4 on the full size cards (channel 4 in lower slot and channel 16 in upper slot) may cause the remote 64xN card to activate its network loopback. The only way to release this loopback is locally at the remote location using the craft port or remotely using GUI management.
6. 64xN (3634) - Timing - When running the 64xN (3634) over multiple timeslots, it is advisable to set the ext. timing option to "on". Otherwise the DTE equipment may have sync problems. This problem showed up when using a Cisco1600 router with V.35 but it works normally when using DTE test sets.
7. E1 Controller (3603) / DSU (3633) /OCU (3632) - Loopbacks - Loopbacks are not available when using error correction at 56/64K.
8. DSU (3633) - RS-232 interface - When provisioned for the interface type "RS-232", the channel can not be set for a rate higher than 19.2 Kbps pre the RS-232 specification.
9. E1 Controller (3603) / DSU (3633) /OCU (3632) - Loopbacks - The DSU and OCU can only generate loopbacks toward the primary E1 when a 2nd E1 is in the shelf. An attempt to send a loopback toward the secondary E1 will go out the primary E1 and can overwrite the data that is in that same timeslot on the primary E1.
10. OCU (3632) - The sw56 option is non-operational.
11. OCU (3632) - SNMP and GUI do not indicate an SNMP initiated loopback on even number circuits even though the LED turns on and you hear the relay change state.
12. E1 Controller (3603) - Provisioning History - The E1 Controller unit has a history buffer. If multiple different card types are plugged into the IAD, this buffer may overload. When this happens, bit errors occur or some channels may be corrupted. If these conditions are experienced, perform a reset to stored values. If this does not resolve the conditions, perform a reset factory default on the system. This should be done as a last resort since it will take down all customers, channel settings and time slot allocation will be cleared to default.
13. E1 Controller (3603) - GUI - Typically it takes less than a minute for the GUI to recognize (green check mark) a local E1 Controller unit when it's IP address matches one that has been put in the GUI database. However, if the E1 Controller unit is removed and replaced with a unit that has the same IP address, subnet mask and gateway address, it may take up to 9 minutes for the GUI to recognize it. This is because the units have different Mac Addresses. The one way to shorten this time span to less than a minutes is to reset the GUI PC. It is also possible to delete the entry in the arp table using the command 'arp -d <ip_address>'. It isn't an issue for recognition of far end units thru the ESF datalink.
14. E1 Controller (3603) - GUI - The database must have at least two units entered in it to see the red 'X' and green check '√'marks.
15. Secondary E1 (3608) - The practice states that a factory default with no channel units plugged in will automatically assign timeslots to a phantom circuit. When this happens, it blocks data from the east to west but not from west to east because the default sets the timeslot mode to broadcast. Thus, the phantom is dropped to the primary but is then broadcast to the east.

3633 (DSU) Module:

16. DSU (3633) - Loopbacks - About half the time network initiated alternating DSU loopbacks will fail when using a HP37702A test set if a latching DSU loopback was sent previously. This problem is with the test set, not the DSU unit. This function works when checked with a TPI, and two different T-Berd test sets.
17. DSU (3633) - Craft Terminal - When in the DSU loopback menu, if a loopback (ocu, dsu, csu) isn't chosen and apply settings is selected, it may cause continuous scrolling of the prompt.
18. DSU (3633) - (half size unit) to the HP 3779 - When using channels 29-30, the DTE gets errors when configured for RS232. Channels 25-28 are OK. If channels 29-30 are set to RS530, then it's OK.
19. 64xN (3634) - Timeslot - The 64xN indicates broken timeslots when used in multi-timeslot mode due to the E1 card buffer overloading. A reset to stored values should fix the problem.
20. 64xN (3634) - Craft - When enabling the loopbacks the loopback active indication (LPBK shown below the channel number) does not appear immediately after activating the loopback. Exiting the provisioning screen and re-entering the screen will show the loopback is active.
21. The HDSL Adapter module (81-002219-Aof 97-001787-A kit) designed for the 360-80 Issue two shelf can be used with the H2TU-C-202 module made by ADC. However the bipolar E1 signal to the 3603-86 module needs to be connected to the HDSL modular jack and the external HDSL2 signal connects to pins 1and 2 of the E1 modular jack of the adapter module.