

CAIL Release 8.0 Update

1.1 CAIL / Plus Version 8.0 Enhancements

A. New Visual, Configuration & Function

1. New setup item (Font Quality) allows users to select the type of font smoothing to use, improving the look and readability of the screen
2. Improvements to IndexView session switching – now faster and smoother
3. Added scrollback pages to vt100 sessions – allows users to review data that has scrolled off the screen
4. Added setting for Backspace key in vt mode – can now send a backspace (0x08) or a delete (0x7F)
5. Added right mouse button click context menu when text is selected to allow easier cut and paste operation, plus printing of a selected area
6. Enhanced foreign language keyboard support to better support character substitution
7. Added throttle for the Return key while Type Ahead is enabled. This prevents the long delay if you hold the Return key down in conversational mode. Only one Carriage Return is now buffered – all other contiguous CRs in the buffer are discarded
8. Made changes to allow correct display of line drawing characters (i.e. Seeview), or foreign characters with a new setting in the Font dialog (Font Substitution)
9. New FTP client supports clear text, SSH secured FTP (SFTP), and SSL secured FTP (FTPS). When used with the CAIL SSL FTP Proxy, Volumes and Sub-Volumes are listed and updated in real time
10. New FTP client automatically senses file types (binary or text), and appends the file type to the file name on transfers from the NonStop host to the PC
11. Vista ready

B. Communications Extensions

1. CAIL / Plus now supports vt100 mode for connections to OSS sessions

2. Reduced connect times
3. Enhanced <esc>-9e escape sequence to return additional info besides ip address (user name, domain name, workstation id, and netbios name)
4. Added block mode support for <esc>-9e – previous enhancement only worked in conversational mode
5. Additional enhancements to binary mode file i/o - added ENQ and ACK or NAK to binary read termination characters

C. Expanded Security / Encryption

1. Implemented code to reduce connect times with secure sessions using Diffie-Hellman key exchange
2. Added support for direct SSH connections in vt mode
3. All CAIL secure server software can now be run nonstop
4. Added SSH options for encryption type, compression type, timeout length and SSH connections through a Socks Proxy
5. Added SSH options for authentication via username/password, private key, or both
6. Added support for SSH host forwarding (i.e tunneling)
7. Added the ability to verify certificates via CRLs (Certificate Revocation Lists) during SSL secured sessions (Telnet and FTPS)
8. Added support for SSL secured FTP (FTPS) sessions – includes Guardian based host SSL FTP proxy. This client can securely communicate with any system that has an FTPS server
9. Added support for NonStop Host to Host SSL secured FTP (FTPS) sessions via an SSL FTP Client proxy. Will also interoperate with other systems that have an FTPS server
10. Added special PCProxy and SSLProxy disconnect messages rather than just displaying “Error 1200x” when the host closes a secure session

D. Seamless Operations

1. Added dynamic emulation type switching to allow Guardian and OSS to be supported from the same session. Uses new escape sequences: <esc>[9l and <esc>[9h to accomplish switching. Now also include a small TAL program called “OSHCAIL” which will send these escape sequences and invoke OSH with the correct arguments
2. All CAIL Guardian based software is now available for Itanium based NonStop systems (HP Integrity NonStop)

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1.2 CAIL / Plus Version 8.0 Bug Fixes

E. Visual, Configuration & Function

1. Enter key on keypad producing 2 carriage returns, now sends one as it should
2. 132 column initialization fixed to properly show scroll margins after switch from 80 columns
3. Added telnet synchronization support so that IAC (Break) ignores data up to Data Mark – makes Break respond faster
4. Fixed problem with scroll margin indices when entering vt mode
5. Fixed problem with the incorrect setting of attributes when adding new lines during scrolling and screen/line erasures in vt mode
6. Cursor position no longer changed on screen clear in vt mode
7. Enter and Shift-Enter did not send the same thing (Carriage Return) in conversational mode – this has been fixed
8. Changed default behavior in vt mode for the Backspace key to backspace (0x08) rather than delete (0x7F) to be compatible with the NonStop OSS environment
9. When changing number of columns in vt mode, the number of rows was set to the value in setup for the number of rows in 6530 mode, now limited to 24 for vt mode
10. Made changes to keyboard handler for vt mode as some keys were not handled properly
11. Fixed issue that caused a session that was connecting or remotely disconnected to take focus
12. Made change so that the TAB key sends control-i in vt mode, as it should
13. Disable cursor positioning via mouse in vt mode. Since vt mode is character based, when the mouse was moved by the cursor, the host wasn't aware of it and caused garbled screens
14. When pasting into a vt session, characters were lost – this has been fixed
15. When “Auto Font Sizing” and “Full Screen” were both checked and the font was set to “System”, shrinking the screen caused invalid mouse cursor positioning – this has been fixed
16. Mouse clicks past the last character on the screen were ignored – this was changed so that any attempt to position cursor with the mouse beyond the last non-blank location will adjust it to the last non-blank location

17. When the scroll bar was disabled and then re-enabled the slider bar was always back at the top position – this has been fixed
18. The scroll bar margins were not set correctly after loading a vt session
19. Disconnect toolbar button was not working while a connection was in progress – this has been fixed

F. Communications

1. The Esc-z escape sequence sent from the host should close the session but locked CAIL / Plus – this has been fixed
2. The 6530 specification says that only a Carriage Return can terminate a write to line 25, and that the Carriage Return should not be acted upon in any way. However, some 6530 emulators allow other control characters such as LineFeed to terminated writes to line 25, and also act upon the linefeed, causing the cursor to go down one line on the 24 line part of the display. To maintain compatibility with these programs we changed the behavior to emulate this “bug”
3. The Read Machine Name escape sequence now works in block as well as conversational mode
4. For vt mode, the Line Mode setting is now ignored and all connections are character based
5. Fixed bug in esc r (Define Data Type Table) escape sequence - didn't handle digits A->F correctly

G. Security / Encryption

1. During End to End encryption sessions via PCSST, script did not play back correctly – this has been fixed
2. Fixed several issues that caused the CAIL Secure Proxy (PCPROXY) to not run nonstop, when specified to do so via the NonStop PARAM
3. Fixed an issue with the CAIL End to End encryption solution (PCSST) that caused it to stop working when the user entered OSS via the “OSH” command

H. Other

1. Several small issues in vt mode, discovered by using the VTTest program have been fixed
2. 8 bit characters (usually foreign or line drawing) now print properly
3. Fixed a GPF caused by pasting into a conversational mode screen
4. Fixed garbled screen after processing sequence to position cursor to line 25, col 1 in vt mode
5. IsControlConnected COM method returned value > 0 when session was disconnected – this has been fixed
6. LoadConfig COM method caused GPF when processing configuration file with a MaxPages entry > 12 – this has been fixed
7. Fixed problem that caused Control-Print-Screen to print both a text and graphic representation of the screen

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B. Communications

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2. Added dynamic emulation type switching to allow Guardian and OSS to be supported from the same session. Uses new escape sequences: <esc>[9l and <esc>[9h to accomplish switching. Now also include a small TAL program called “OSHCAIL” which will send these escape sequences and invoke OSH with the correct arguments
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5. Added block mode support for <esc>-9e – previous enhancement only worked in conversational mode
6. Additional enhancements to binary mode file i/o - added ENQ and ACK or NAK to binary read termination characters
7. Added the ability to allow operation as 1 port away – lets you use an old terminal via TCP/IP

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