Corrections, Additions, and Updates to CLIO/S User's Guide and Reference

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Joe Casey
Phone: 914-433-7796
Tie line: 8-293-7796
email: joecasey@vnet.ibm.com
This document is available from the CLIO/S Worldwide Web page:
http://www.rs6000.ibm.com/software/sp_products/clio.html

Preface

This document contains information that has been corrected, added, or updated in the CLIO/S User's Guide and Reference.

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Chapter 1. Corrections

- Appendix E, Dynamic Device Allocation on MVS: CLIO/S parameter UNITCount should be UNICount, so abbreviation is UNIC, not UNITC.

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Chapter 2. Additions

Translate table

The clftp and clplink interfaces allow you to specify your own character translation table. This function is available with CLIO/S V2 R2, but was not documented.

Using the translate table function

The Site parameter 'TRANSLATE=fileid' has been added to allow you to specify a file containing translate tables for ascii files. The file consists of three 256 byte records. The first record is ignored. The second record is the ascii-to-ebcdic translate table, and the third record is the ebcdic-to-ascii translate table. (The format of the file is the same as the format of the MVS TCP/IP TCPXLBIN files.) The translate tables are arrays containing 256 1 byte characters. Clftp and clplink will index into the arrays using the numerical value of the character that should be translated (for example '41'X for ascii 'A'). The value that the array contains is the numerical value of the character to which the first character should be translated (for example 'C1'X for ebcdic 'A'). The files containing the translate tables can be on AIX or MVS. On AIX, the files should be 768 bytes long where the first 256 bytes are ignored, the next 256 bytes are the ascii-to-ebcdic translate table and the final 256 bytes are the ebcdic-to-ascii translate table.

The Site parameter 'MVSEOL=2-byte-hex-value' is used to specify the end-of-line character that should be used on MVS. The end-of-line character is used by clftp and clplink to identify the end of an ascii record. The default value is '15'X. When the MVS side of CLIO/S gets an ascii file, it looks through the characters of the file to find '15'X characters and uses these as its identifier of the end of each record. When the MVS side of clftp and clplink reads in an ascii file, it inserts '15'X characters into the data so that the ebcdic to ascii translation will translate them to the ascii end-of-line character, '0A'X. (Since AIX files don't have the kind of record structure that MVS files do, they rely on the '0A'X character to identify the end of each record.) By inserting the MVS end-of-line characters while we are reading, CLIO/S can create big blocks of records that can be translated in bulk, thus helping performance a great deal. Some customers have '15'X characters in their ascii files. They need a method of using another character besides '15'X for the end-of-line character. The MVSEOL= site parameter allows you to specify any character you want to. For example to set the MVS end-of-line character to 'FF'X you would specify SITE MVSEOL=FF When you pick a character, however, you should be careful to pick one that doesn't appear in their ascii files.

The MVSEOL character must translate to '0A'X in the ebcdic to ascii translate table. This is necessary to make sure that the AIX file created has the same record structure as the MVS file. In addition, the ascii to ebcdic translation table must translate '0A'X to the MVS end-of-line character. This is necessary to preserve the record structure in the other direction. Clftp and clplink check to make sure that the translate tables are set up to translate the end-of-line characters properly. If the tables don't do this, an error message is issued and the transfer fails.

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New CLIO/S Environment Variables

PTF 3, UQ14204, adds two new environment variables. CLIO/S environment variables are described in Section 3.1.5.2.

- CLIODFILEPID is a variation of CLIODFILE.

  The value of CLIODFILEPID is used as a prefix, and the process id is used as a suffix. For example, if CLIODFILEPID=/tmp/cliodebug, CLIODEB=-1, and if a CLIO/S process is running with process id 21338, then the debug output will appear in /tmp/cliodebug.21338. CLIODFILEPID is useful when concurrent CLIO/S processes are started from the same environment. If CLIODFILE were used in this case, all the processes would attempt to write debug output to the same file. NOTE: If CLIODFILE is set, CLIODFILEPID is ignored.

- CLIOEFILEPID is a variation of CLIOEFILE.

  The value of CLIOEFILEPID is used as a prefix, and the process id is used as a suffix. For example, if CLIOEFILEPID=/tmp/clioerror and a CLIO/S process is running as process 21338, then any CLIO/S error messages would appear in /tmp/clioerror.21338. CLIOEFILEPID is useful when concurrent CLIO/S processes are started from the same environment. If CLIOEFILE were used in this case, all the processes would attempt to write error messages to the same file. NOTE: If CLIOEFILE is set, CLIOEFILEPID is ignored.

Chapter 3. Updates

Appendix F, 'IOCP, SMIT, TCP/IP and CLIO/S Cross Reference', has been updated as **Channel Connection Configuration Cross-Reference**, a standalone web document. It can be found on the CLIO/S web page, along with other useful documents.

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