CODE MAGUS

mc1014: Banknet Format 1014 File Access Method using Recio Version 1

CML00083-01

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Contents

1   Introduction

The `mc1014` access method is a module which implements the `recio` [1] provider interface allowing the `recio` user interface to support reading and writing Master Card Banknet 1014 format files.

2   Open String Specification

As with all `recio` library open specification strings, three components comprise the open string: access method, object, and options name-value pairs.

2.1   Open Specification Access Method Name

The access method name should be specified as `mc1014`.

2.2   Open Specification Object Name

The object name should be a suitable file name on the local system. For reading this must be a Banknet 1014 format file and for writing a Banknet 1014 format file will be produced.

2.3   Open Specification Option Name-Value Pairs

Consult the access method definition file for the option name-value pairs supported by the `mc1014` access method. The access method definition file also supplies details of the default values (if any) of the options.

2.4   Open String Specification Examples

The following open string specification could be used to open and read an input file formatted as a Banknet 1014 format file.

```
mc1014(mcfile.dat,mode=rb)
```

The following open string specification could be used to open an output file, as a Banknet 1014 formatted file, for writing.

```
mc1014(mcfile_out.dat,mode=wb)
```

3 `mc1014` access method definition file

The access method definition file should be consulted for the description of the options and their default values. This includes the description of the options. The access method definition file should also be consulted for the processing modes supported by the access method.

Refer to the `recio` library documentation for interpreting the contents of the access method definition file.

```
access mc1014(mode);

  -- File: MC1014.amd
  --
  -- This file contains an access method definition which is used to read
  -- and write local files formatted as Master Card Banknet 1014 files.
  --
  -- Author: Stephen R. Donaldson [stephen@codemagus.com].
  --
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  -- $Author: hayward $
  -- $Date: 2011/03/29 08:14:56 $
  -- $Id: MC1014.amd,v 1.6 2011/03/29 08:14:56 hayward Exp $
  -- $Name:  $
  -- $Revision: 1.6 $
  -- $State: Exp $
  --
  -- $Log: MC1014.amd,v $
  -- Revision 1.6  2011/03/29 08:14:56  hayward
  -- Correct description
  --
  -- Revision 1.5  2011/03/24 21:27:17  hayward
  -- Re-engineer the algorithms for reading and writing
  -- Banknet 1014 format files. These files are 1012 bytes
  -- of data with two bytes of binary zeroes at the end of
  -- each block. Within the usable portion (1012 bytes) the
  -- records are a stream of data with a big endian 4 byte
  -- length (exclusive) prepending the actual record. The
  -- final block is always padded with EBCDIC spaces to make
  -- a complete block.
  --
  -- Revision 1.4  2011/03/18 10:47:13  hayward
  -- Make lastblock default "full".
  --
  -- Revision 1.3  2011/03/08 19:07:46  hayward
  -- Add option to allow last block to be full or not.
  --
  -- Revision 1.2  2011/03/08 10:23:48  hayward
  -- Allow AM to use skip_input.
  --
```

```
-- Revision 1.1.1.1  2011/01/13 19:26:11  hayward
-- Add to CVS.
--

 modes seq_input, seq_output, skip_input;

 implements open;
 implements close;
 implements read;
 implements write;
 implements point;
 implements tell;

 describe mode as
    "The mode is the open mode string which will be passed to the C Standard "
    "I/O Library."
    ;

 constrain mode as "^[rwa]b$";

 path = ${CODEMAGUS_AMDLIBS} "%s";
 module = "mc1014am" ${CODEMAGUS_AMDSUFDL};
 entry = mc1014am_init;

end.
```

4   Environment

The location and format of the access method definition file is required to be specified by the environment variable CODEMAGUS_AMDPATH. This environment variable supplies a pattern to the full path of where access method definition (or amd) files are located. The format of the environment variable is that of a path with a %s appearing in the position in which the access method member name should appear. For example, on MVS systems this might have the form:

```
CODEMAGUS_AMDPATH='DNCT00.SRDA1.AMDFILES(%s)'
```

On a Unix-based system, the value might be set in a shell profile file such as:

```
export CODEMAGUS_AMDPATH=$HOME/bin/%s.amd
```

On Windows systems, the value might be supplied from the environment variables and look something like:

```
C:\CodeMagus\bin\%s.amd
```

References

[1] recio: Record Stream I/O Library Version 1. CML Document CML00001-01, Code
     Magus Limited, July 2008. PDF.