Convert

User Manual

Version 2.0
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1. Introduction

Convert is a powerful file conversion program. It covers the application domain of all ASCII conversion tools between Amiga and MS-DOS or any other computer system. This means, that file conversion with *Convert* does **not** affect the physical format of a file but only its contents. Physical conversion is not subject of *Convert* and thus assigned to tools like *CrossDOS*.

Convert can be used to replace bytes or pairs of bytes in a file by another byte or another pair of bytes or by nothing. Therefore it can be used for tasks as follows:

- replacing TABs in an ASCII file with blank character(s)
- stripping controls in an ASCII file
- converting ASCII-files between Amiga and MS-DOS, MS-DOS and Amiga, Amiga and Mac, Mac and Sun, Amiga and Sun etc.

What are *conversion descriptions* ?

All that *Convert* needs, is a set of *replacement records* which it can apply to its input files. This set is in the following called *conversion description*.
You can create your individual conversion descriptions by creating several *replacement records* with a text editor using the simple syntax described in chapter 4. These records are stored to a conversion description file which can be parsed by *Convert*.

The draft of specifying the conversion by a simple text file makes *Convert* more powerful than any other conversion tool and thus allows the application of *Convert* for almost all conversion problems.

2. Getting started

Installation

To install *Convert* double-click the *Install* icon. This short shell script will do the following things:

- copying *reqtools.library* to the LIBS: directory.
- copying *Cvt* to the C: directory.

Furthermore, you must have a directory from where *Convert* reads its conversion description files. If this directory is not the same as the one where *Convert* is placed, you must assign the logical device `CVT:` to it. If *Convert* starts, first it looks in the current directory for conversion descriptions. If it cannot find any matching file (with the extension *.cvt*), it tries to get files from `CVT:`.
Note: If *Convert* cannot find any description file, it will *not* work !

Starting *Convert*

You can start *Convert* by entering its name in the shell or by double-clicking its icon.
If the program can locate at least one conversion description, it opens a window which contains the control panel of *Convert*. This panel consists of following elements:

Source file list

This list on the left side of the buttons displays the names of all files to be converted. The names are shown without path name, except if you select two files in different directories with the same name. Then the whole path name is displayed.

Conversion list

This list on the right side of the buttons displays the names of the conversion description files which *Convert* could locate at the start. The currently selected conversion description file is shown beneath the list. By default the first name of the list is selected.

Button *Clear*

You can use this button for deleting the current contents of the source file list. If the files in this list have not been converted yet, you will be asked to confirm your decision.

Button *Add files...*

If you click this button, a file requester will appear. You can then select the files which you want to convert by clicking on the file names while holding the SHIFT key. In addition there are buttons for selecting and de-selecting all files and for pattern matching. Press the button *Ok* to add the selected files to the source file list.

Button *Remove*

You can use this button for deleting the currently selected item in the source file list. If the files in this list have not been converted yet, you will be asked to confirm your decision.

Button *Start*

A click on this button starts the conversion process.

Button *About...*

Click this button to get short information about *Convert*.

Button *Quit*

You can use this button for exiting *Convert*. If the files in the source file list have not been converted yet, you will be asked to confirm your decision. You can also quit by clicking in the close gadget of *Convert*'s window.

Cycle-gadget *Replace Original/Target Directory*

This cycle-gadget can be used to toggle between the following two modes:

1. replacement mode
2. duplication mode

The replacement mode is active, when the gadget shows the text *Replace Original*. Former versions of *Convert* (up to v1.12) only provide this mode. In this mode *Convert* replaces the original file with the converted version.
If you choose the duplication mode, a directory requester will appear and you have to select a target directory, where *Convert* will write the converted files. The name of the target directory is then displayed within the cycle-gadget.

3. Working with *Convert*

When you have started *Convert* from the shell or from workbench, it will open a window which contains a small control panel. The source file list on the left side of the buttons is empty, so the buttons *Clear* and *Start* are "ghosted".
Whenever you want to append files to the source file list, press the button *Add files*. A file requester will appear which allows you to select the desired files. Press the *Ok* button to append the files to the source file list.
If you do not want to overwrite the old files with the converted versions, then you can specify a target directory for the converted files by pressing the cycle-gadget at the botton of the window. When you have chosen a target directory, its name will be displayed within the gadget.
Before you start the conversion process, make sure you have selected the correct conversion description in the list on the right side of the buttons. The current description is shown beneath the list.
The conversion process can be started by pressing the *Start* button. *Convert* will open a window which gives you a simple trace about the conversion. If the conversion description contains no syntax errors, the conversion should be performed without any problem. Otherwise you have to correct the description file with a text editor.
At the end *Convert* informs you with a simple requester about the success of the conversion process. If there were no problems, you can return to the control panel.
Usually you will want to clear the source file list for the next conversion procedure or to quit from *Convert*.

4. Creating own conversion descriptions

A conversion description file consists of a set of replacement records. Such a record describes how a byte or a pair of bytes should be replaced by another byte or another pair of bytes or by nothing.
The structure of a conversion description can thus be described with the following grammar in EBNF:

```
ConvDescr = { ReplRec }.

ReplRec   = Primary '->' [ Primary ].

Primary   = Byte [ ',' Byte ]
          | String.

Byte      = digit { digit }
          | '"' char '"'.

String    = '"' char char '"'.
```

Character sets:

```
  digit = any decimal digit (0-9).
  char  = any character but '"'.
```

NB.: *Byte* always stands for 1 byte, *String* always stands for 2 bytes !

Each replacement record must be written in a separate line.

Furthermore a conversion description may contain comments which are written like in the programming languages Ada or Eiffel (beginning with "--", until end of line). The comments must **not** occur after a replacement record.

Example:

```
-- this is a short example of a conversion description

--replace byte pair (14,37) with byte 121
14,37->121
--replace byte 154 with byte 254
154->254
--strip byte pair (31,201)
31,201->
--replace byte "A" (character) with 13
"A"->13
--replace string "RK" with string "SN" (for byte-fanatics)
"R","K"->"S","N"
```

```
--replace string "<<" with string ">>" (for lazy writers)
"<<"->">>"

--the following lines are incorrect:
14,37,->12
->13
20->41 --this comment does not belong to here !
--string "XX" stands for byte pair, byte "Y" is too much
"XX","Y"->
--if you want to convert '"' then use numbers !
"""->22
```

(end of file)

5. Error Messages

Convert distinguishes between *internal* errors and *user* errors.

Internal errors are reported by a short output in the shell window or a requester with the title *FATAL ERROR*. If an internal error occurs, the reason may be a lack of memory. The execution of *Convert* is immediately terminated and you have to increase the free memory size by quitting from another application before restarting *Convert*. There exists one special internal error which is raised, if *Convert* cannot find any conversion description files. This error is named

Cannot find a conversion description ! - No conversion possible.

User errors are reported in a requester named *Information*. Errors of this kind may occur during a conversion process. In this case *Convert* will stop the process and return to the control panel. The user errors are listed below.

Error in conversion description file in line x
Conversion description file not found

These errors may occur at the beginning of the conversion process when *Convert* tries to open and to parse the current conversion description file.
The first error is reported, whenever a syntax error has been encountered in the description file. See chapter 4 for further details.
The second error is reported, when *Convert* cannot open the description file. Since the list of description files is built at the start of *Convert*, another task may have removed the requested file.

File not found or conversion of empty file attempted

This error may occur during the conversion process, when *Convert* cannot open a source file. Another task may have removed the file between the selection of the file and the beginning of the conversion process.

Could not get/set file date

This message appears if the handler process of the device from the source files are read does not understand the SET_DATE command. "Convert" tries to save the old date of a file, since only the file structure should be changed. If the device driver of your harddisk does not support date setting, then try the conversion using another device, i.e. RAM:.

Cannot create temporary file

In general *Convert* does not save the converted file directly over the original file, but creates a temporary file in the same directory where the original file is located. If a write-protected file with the same name (*CvtTmp_<task address>*) exists in this directory ,this message tells you that *Convert* will save the converted file directly over the original file.

Cannot write converted file

If one of the source files is opened for output by another task during the conversion process, this error will be reported.

Cannot lock target directory

This message may only appear in duplication mode. It indicates that Convert could not get read access to the specified target directory. A possible reason is that there is another task that has exclusive (write) access to the directory.

Internal overflow: too many subdirectories

This message may only appear in duplication mode. It indicates then the path name of a source file to be converted contains more than 20 subdirectory names.

6. The shell version *Cvt*

This program is a reduced version of *Convert*. It does not provide a graphical user interface but accepts all parameters from the shell.
If you call *Cvt* without any parameters it will print the following short description:

```
»» Convert «« conversion utility v2.0 for AmigaDOS
Copyright (C) 1992-1993 by Rainer Koppler

USAGE: Cvt "FILES" <file> { <file> }
           ("DESCRIPTION"|"DSC") <ConversionDescription>
           [("TARGET"|"TRG") <TargetDirectory>]
           ["QUIET"]
```

If you call *Cvt* with the parameter "?", it will prompt you with the following AmigaDOS command template:

```
FILES/...,DESCRIPTION=DSC/K/A,TARGET=TRG/K,QUIET=Q/S
```

You have to enter an argument list then according to this template or you can enter "?" to get the brief description as shown above.

Description of the parameters:

The parameter represented by the keyword **FILES** consists of a list of names. A name can be any valid AmigaDOS file name or a pattern containing AmigaDOS wildcards. All files in this list will be converted by *Cvt*. The keyword may be omitted.

The parameter with the keyword **DESCRIPTION** (abbreviated as **DSC**) may not be omitted. It specifies the file name of the conversion description (full path name). Note that also the keyword may not be omitted.

The parameter **TARGET** (abbreviated as **TRG**) is optional. If you specify it, *Cvt* will write the converted files to the given directory (see *duplication mode*, chapter 2). Note that also the keyword may not be omitted.

If you wish *Cvt* to produce no output you must specify the switch **QUIET**. It may be abbreviated as **Q**.

7. Disclaimer

This program is **Freeware**. This means that you may not charge any fee for any part of this archive. *Convert* may be freely distributed as long as this documentation is kept together with the executable.

Furthermore the author takes **no** responsibility for any damage caused by any usage or misusage of *Convert*. This fact is especially stressed for the conversion descriptions provided in this archive. You use any part of this archive at your own risk.

As a consequence of the Freeware condition, no support from the author is granted. Nevertheless you can contact me if you find any bugs or you have any senseful idea how to improve this product.

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