

AWS 95: Carriage Return To Line Feed Translation (6/94)

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TOPIC -----

Can you please explain the carriage return/line feed translation issues with A/UX 3.0.1 across finder or AppleShare copies, and what the TBTRANSLATEUXONLY variable does?

We are copying a large postscript files (10-50 MB), from a Macintosh to our Apple Workgroup Server (AWS) 95, and in turn other UNIX users on SUN's and SGI's get the files from the AWS 95. When the other UNIX users retrieve the files, they are corrupted.

We have compared the original files to the version that has been copied to the AWS 95 using MPW's dumpfile command, and observed that carriage returns have been converted to carriage return/line feed pairs. This corrupts the postscript information. We have been experimenting with the TBTRANSLATEUXONLY variable to see if that will help resolve the problem. The file types are actually binary even though they are just postscript text files.

Our understanding is that the TBTRANSLATEUXONLY variable only applies to the translation of carriage returns to line feeds under A/UX when a text file is saved from within a Macintosh text editor, and has no effect on finder copying or AppleShare copying. The carriage return to line feed translation will occur during a text file save or open operation if the TBTRANSLATEUXONLY variable is set to 0,1,2 or anything, and will not occur if the variable is commented out of the mac32 file. Is this correct?

Additionally, we thought that during finder or AppleShare copying, the only translation that should be taking place is the TBFILEFORMAT translation with AppleSingle or AppleDouble, and that the data in the file should not be modified. Is this true or are there some issues with binary files and MacBinary format that may cause some sort of data translation?

Any clarification of these translation issues will be greatly appreciated. There is an article in the TIL entitled "cat Displaying Files Incorrectly" that has some of this information, but does not provide the complete answer we are looking for. DISCUSSION -----

Lets see if we can help clear up the confusion surrounding the effect of the TBTRANSLATEUXONLY variable and fix your problem in the process.

If the TBTRANSLATEUXONLY variable is set

If a file is saved, or copied, to an AppleShare Pro File Server from a workstation as a "standard text" file, or if a "standard text" file is saved from within an Application running under the Finder on the Server itself:

The end of line characters are preserved. What this means is that carriage return characters, normal Macintosh end of line delimiters, will be used to terminate the end of a line.

It also means that if you use TeachText to edit the /etc/passwd file you will corrupt the file as it will then have carriage return characters instead of newline characters as the end of line delimiters.

If the TBTRANSLATEUXONLY variable is not set (commented out of /mac/bin/mac32)

If a file is saved, or copied, to an AppleShare Pro File Server from a workstation as a "standard text" file, or if a "standard text" file is saved from within an Application running under the Finder on the Server itself.

The end of line characters are translated. Carriage returns will be translated to newline characters to delimit the end of a line.

Special Note on TBTRANSLATEUXONLY

There is an interesting undocumented feature of TBTRANSLATEUXONLY. If this variable is set (to any value) when copying a file of type "TEXT" to an AppleShare Pro Server the file will be saved in AppleSingle format unless the file is of type "A/UX". If the type is "A/UX" the file will be saved in AppleDouble format. The default action without this variable being set is to create any file of type "TEXT" in AppleDouble format. It's also interesting to note that this behavior is slightly changed in A/UX 3.1. Pre-release 3.1 all files of type "TEXT" were stored in AppleDouble format.

Special Note on TBFILEFORMAT

If set, the environment variable TBFILEFORMAT forces all files to be saved in AppleDouble format.

Conclusions

You should edit the /mac/bin/mac32 file and comment out the lines that define the TBTRANSLATEUXONLY variable. Once this is done log out and back into the Macintosh environment and restart AppleShare Pro. Any files you create, or copy to the server should now be saved with newline characters instead of carriage returns. Users on other UNIX systems should then be able to retrieve the files and manipulate the data without any problems. Support Information Services Copyright 1994, Apple Computer, Inc.

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