



Tech Info Library

AFP: How To Implement Record-Locking

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TOPIC -----

How does multi-user software (like 4th Dimension) work with regard to AFP?
Doesn't AFP provide a record-locking feature, so that the record is locked automatically or is that part of some structure inherent in multi-user software (like 4th Dimension)?

DISCUSSION -----

The AppleTalk Filing Protocol (AFP) lets a workstation on an AppleTalk network access files on an AFP-compatible file server. AFP specifies a remote filing system that provides user authentication and an access-control mechanism that supports volume- and folder-level access rights.

AFP does not provide file-locking and record-locking features to applications automatically. File-locking may be implemented by the application if the appropriate parameter is passed to the AFP call (FPOpenFork) made by the application that opens the file. These parameters include:

0	Read	allows the file to be read
1	Write	allows the file to be written to
4	DenyRead	denies others the right to read the file while this user has it open
5	DenyWrite	denies others the right to write to the file while this user has it open

Record-locking is accomplished in a much more complicated fashion. The application may lock a record by using the AFP command "FPByteRangeLock". To do this, the application must calculate where in the file the record starts and stops. This information is then passed to the "FPByteRangeLock" command and that range in the file is locked. The record may also be unlocked by using the "FPByteRangeLock" command.

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