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Wednesday, June 10. 2015
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Less known Solaris Features: Protecting files from accidental deletion with ZFS

I thought i know a lot about Solaris, however today i found out about a feature that is in Solaris i never heard of. It was on an internal discussion alias. Or to be exact ... i think i've read that part of the man page but never connected the dots: Let's assume you have a set of files in a directory that you shouldn't delete. It would be nice to have some protection, that a short but fatally placed rm typed under caffeine deprivation doesn't wipe out this important file. It would be nice, that the OS protects you from deleting it except you really, really want it (and thus execute additional steps).

Let's assume those files are in /importantfiles. You can mark this directory with the nounlink attribute.

root@aramaki:/apps/ADMIN# chmod S+vnounlink .
root@aramaki:/apps/ADMIN# touch test2
root@aramaki:/apps/ADMIN# echo „test" >> test2
root@aramaki:/apps/ADMIN# cat test2
test
root@aramaki:/apps/ADMIN# rm test2
rm: test not removed: Not owner
root@aramaki:/apps/ADMIN# chmod S-vnounlink .
root@aramaki:/apps/ADMIN# rm test2
If you just want to do it for a single file, this is possible, too
root@aramaki:/apps/ADMIN# chmod S+vnounlink test4
root@aramaki:/apps/ADMIN# rm test4
You can still change the files in the directory. Of course you are still able to write zeros or trash into it and thus removing the content by accident. You can write into the files But even as root, i can't delete those files without removing this attribute. So you can't delete this files by accident. Very useful for a broad set of files, for example redo log and datafiles from your database. The obvious requirement: You application shouldn't delete the files as a regular pattern of operation. Solaris would block you application from doing so.

By the way: Darren Moffat showed how to make a file immutable back in 2008 with the same command, just a different attribute in his blog entry "Making files on ZFS Immutable (even by root!)"

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Posted by Joerg Moellenkamp in English, Solaris at 19:53
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Equals to chattr in Linux...
  Anonymous on Jun 11 2015, 18:30

After some 30 years of UNIX work.. Never seen this one.
  Anonymous on Jun 12 2015, 18:04