

# Specific differences between Linux and Windows

When porting a D2000 application developed for Windows to Linux, you may encounter the following differences:

- File names and paths are case-sensitive
- Directory separator is "/" (slash)
- File access rights (owner/group/others)

When patching D2000 binaries, the following steps should be performed

- owner/group should be changed to the D2000 user and group under which the D2000 system was installed, e.g.  
*chown d2000:d2000 kernel*
- read/write/execute flags should be set so that at least the D2000 user can run them, e.g.  
*chmod 755 archiv*
- D2000 Kernel process requires special capabilities to create multicast sockets:  
*setcap cap\_net\_raw=pe kernel*
- D2000 Kom process may require special capabilities to work with raw sockets, to bind to privileged ports and to work with GPIO:  
*setcap cap\_dac\_override,cap\_sys\_rawio,cap\_net\_bind\_service+ep kom*

While debugging the performance of the D2000 Archive, a bottleneck was identified within the unixODBC component. Performance can be significantly improved by recompiling unixODBC with the "*--enable-fastvalidate*" option enabled, e.g:  
configure --enable-fastvalidate --with-gnu-ld=yes --enable-threads=yes --enable-drivers=yes --enable-driverc=yes

Then you need to replace the original library (/usr/lib64/libodbc.so.2.0.0) with the new one and also replace the symbolic link /usr/lib64/libodbc.so.2.