6

Access to MSC/PATRAN Databases from External Programs

■ Linking to the dbaccess.a Archive File

6.1   Linking to the dbaccess.a Archive File

MSC/PATRAN Version 8 includes the dbaccess.a archive file in the customization directory. The dbaccess.a archive file provides support to allow external programs to access MSC/PATRAN database files.

Some of the function support provided by dbaccess.a is documented in the "Part 9: PCL and Customization" manual. Run time support of the listed functions is demonstrated by simple C and FORTRAN programs which are delivered in the $P3_HOME/customization directory. The source code file names for these demonstration programs are CAccessCalls.c, fort_access_calls.F, fort_access_calls.f, wrapper_c.C, and wrapper_f.C.

Script files which demonstrate a compilation and link of these files are delivered in the $P3_HOME/customization directory under the file names LinkCAccess, LinkCAccess.cmd, LinkFAccess, LinkFAccess.cmd, and dbxs_link. All of the header files, libraries, archive libraries, and shared objects needed to compile and link the example programs are located in $P3_HOME/customization, $P3_HOME/customizaton/CXX_LIBS, and $P3_HOME/lib directories.

The LinkCAccess script may have to be edited to reflect the location of the system FORTRAN libraries on your local machine before it will run correctly. To run either of the link scripts simply type its name. For example:

Prompt> $P3_HOME/customization/LinkCAccess

or

Prompt> $P3_HOME/customization/LinkFAccess

The run of the script is successful if it creates a "CAccessCalls" or "fort_access_calls" executable in your current directory without any link error messages. The C and FORTRAN utility programs which are created do not call the dbaccess functions that they use with the appropriate arguments. These utility programs are designed to demonstrate the compilation and link of an executable using dbaccess, not the use of the functions themselves. The main function for the utility programs must use the C++ language and be compiled using a C++ compiler to allow all links to be resolved correctly.