# 1 Igore CMS Libraries

```
 LOGICAL LIBRARY
-----------------------------------------------
"IGR_CMS_AFE" = "ODT2:[IGRCMS.AFE.CMSLIB]"
"IGR_CMS_BLD" = "ODT2:[IGRCMS.BLD.CMSLIB]"
"IGR_CMS_DOC" = "ODT2:[IGRCMS.DOC.CMSLIB]"
"IGR_CMS_ICL" = "ODT2:[IGRCMS.ICL.CMSLIB]"
"IGR_CMS_SDB" = "ODT2:[IGRCMS.SDB.CMSLIB]"
"IGR_CMS_ST" = "ODT2:[IGRCMS.ST.CMSLIB]"
"IGR_CMS_STRUC" = "ODT2:[IGRCMS.STRUC.CMSLIB]"
"IGR_CMS_SYS" = "ODT2:[IGRCMS.SYS.CMSLIB]"

 LOGICAL REFERENCE COPY DIRECTORY
-----------------------------------------------
"IGR_REF_AFE" = "ODT2:[IGRCMS.AFE.REFLIB]"
"IGR_REF_BLD" = "ODT2:[IGRCMS.BLD.REFLIB]"
"IGR_REF_DOC" = "ODT2:[IGRCMS.DOC.REFLIB]"
"IGR_REF_ICL" = "ODT2:[IGRCMS.ICL.REFLIB]"
"IGR_REF_SDB" = "ODT2:[IGRCMS.SDB.REFLIB]"
"IGR_REF_ST" = "ODT2:[IGRCMS.ST.REFLIB]"
"IGR_REF_STRUC" = "ODT2:[IGRCMS.STRUC.REFLIB]"
"IGR_REF_SYS" = "ODT2:[IGRCMS.SYS.REFLIB]"
```

## 1.1 CMS Library Commands

```
$ CMS SHOW LIBRARY
$ CMS SET LIBRARY library-name1 [,library-name2...]
$ CMS SET LIBRARY/AFTER library-name
$ CMS SHOW ELEMENT
$ CMS SHOW HISTORY -
_$ element(s)--group(s)--or--generation(s) -
_$ [/SINCE=]
\subsection{FETCH}
\begin{verbatim}
$ CMS FETCH element-name "remark-string"
```

## 1.2 RESERVE

```
$ CMS RESERVE element-name "remark-string"
```

## 1.3 REPLACE

```
$ CMS REPLACE element-name "remark-string"
```

## 1.4 Handling Multiple Reservations

```
$ CMS SHOW RESERVATIONS element-name
$ CMS UNRESERVE element-name -
_$ /IDENTIFICATION=reservation-id-number "remark"
$ CMS REPLACE element-name /VARIANT=X "remark"
```

# 2 Igore MMS Description Files

```
Elements in DEC/CMS Library ODT2:[IGRCMS.BLD.CMSLIB]

FDB_APPS_COMP.MMS "FDB application compile."
FDB_APPS_LINK.MMS "To build FDB shareable..."
FDB_BUILD.MMS "FDB Applications build file"
IGR_BLD_DOC.MMS "IGORE Document build"
IGR_BLD_GV.MMS "Build AFE_PROCESS (gen_vctr)."
IGR_BLD_ICH.MMS "IGORE description files."
IGR_BLD_IGORE_UTIL_VCTR.MMS "Make_igore_utilities_vctr build file"
IGR_BLD_NSHR.MMS "Build NOSHR_PSECTS.EXE (check_common)"
IGR_BLD_PRE.MMS "To build AFE generator (PREPRO.EXE)."
IGR_BLD_SYS.MMS "IGORE description files."
IGR_BUILDSHR.MMS "Make BUILDSHR utility."
IGR_SYSTRAN.MMS "To build Igore system structure utilities."
IGR_USERTRAN.MMS "To build Igore user structure translator  utilities."
MAKEFILE.MMS  "To build the whole enchilada."
MISC_APPS_COMP.MMS "Miscellaneous Applications Compilation Build file"
MISC_APPS_LINK.MMS "MISC link file"
MISC_BUILD.MMS "MISC build file"
PSR_APPS_COMP.MMS "PSR application compile."
PSR_APPS_LINK.MMS "PSR link file"
PSR_BUILD.MMS "PSR Applications build file"
SDB_APPS_COMP.MMS "SDB application compile."
SDB_APPS_LINK.MMS "IGORE description files."
SDB_BUILD.MMS "SDB Applications build file"
```

## 2.1 IGORE Standard Macros.

- CLEAN - If true, build process will delete intermediate products. (.OBJ files, etc.)
- CLEAN_SOURCE - If true, local copies of source files will be deleted. Dangerous if source code is not yet configured.

## 2.2 IGORE Standard Targets.

- LOCAL - (Default). Products will be built into current directory for testing.
- PRODUCTION - Products will be built into production directories as defined by current IGORE setup.

```
$ MMS/CMS/DESCRIPTION=LINK_IGORE.MMS/MACRO=(CLEAN=1) PRODUCTION
```

# 3 IGORE Run-time Directory Structure

```
"IGR$ROOT"  = "IGR:[000000]" - initialization files.
"IGR$EXE" = "IGR:[DAT]"    - Igore data files.
"IGR$DOC" = "IGR:[DOC]"    - documentation and help.
"IGR$EXE" =  "IGR:[EXE]"    - Igore executables and shareables.
"IGR$IDL" =  "IGR:[IDL]"    - Idl procedures.
"IGR$LIB" = "IGR:[LIB]"    - Current object libraries.
"IGR$STRUC" =
"IGR:[STRUC]"  - Structure definitions, source and binary.
```

# 4 Igore CMS/MMS Usage Example.

```
$ CMS SET LIBRARY IGR_CMS_SDB
$ CMS RESERVE SDB$OPEN.FOR "For update of file-info table."
       $ EDIT SDB$OPEN.FOR
$ CMS SET LIB/AFTER IGR_CMS_ICL, IGR_CMS_BLD
$ MMS/CMS/DESCRIPTION=SDB_BUILD.MMS/SKIP -
_$ /MACRO=(FFLAGS=/DEBUG/OPT,LFLAGS=/DEBUG,CLEAN=TRUE)
$ CMS REPLACE SDB$OPEN.FOR "Update file-info utilities."
$ SET DEFAULT IGORE$LIB
$ MMS/CMS/DESCRIPTION=SDB_BUILD.MMS /SKIP_INTERMEDIATE -
_$ /MACRO=(CLEAN=TRUE,CLEAN_SOURCE=TRUE) -
_$ PRODUCTION
```