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   37959 Wed Apr 24 01:32:49 2019
new/usr/src/Makefile.master
10804 Enable unused warnings outside of uts
Reviewed by: Andy Stormont <astormont@racktopsystems.com>
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**********************************************************
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#

#
# Makefile.master, global definitions for system source
#
ROOT=           /proto

#
# Adjunct root, containing an additional proto area to be used for headers
# and libraries.
#
ADJUNCT_PROTO=

#
# Adjunct for building things that run on the build machine.
#
NATIVE_ADJUNCT= /usr

#
# RELEASE_BUILD should be cleared for final release builds.
# NOT_RELEASE_BUILD is exactly what the name implies.
#
# __GNUC toggles the building of ON components using gcc and related tools.
# Normally set to ‘#’, set it to ‘’ to do gcc build.
#
# The declaration POUND_SIGN is always ’#’. This is needed to get around the
# make feature that ’#’ is always a comment delimiter, even when escaped or
# quoted. We use this macro expansion method to get POUND_SIGN rather than
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# always breaking out a shell because the general case can cause a noticable
# slowdown in build times when so many Makefiles include Makefile.master.
#
# While the majority of users are expected to override the setting below
# with an env file (via nightly or bldenv), if you aren’t building that way
# (ie, you’re using "ws" or some other bootstrapping method) then you need
# this definition in order to avoid the subshell invocation mentioned above.
#

PRE_POUND=                              pre\#
POUND_SIGN=                             $(PRE_POUND:pre\%=%)

NOT_RELEASE_BUILD=
RELEASE_BUILD=                          $(POUND_SIGN)
$(RELEASE_BUILD)NOT_RELEASE_BUILD=      $(POUND_SIGN)
PATCH_BUILD=                            $(POUND_SIGN)

# SPARC_BLD is ’#’ for an Intel build.
# INTEL_BLD is ’#’ for a Sparc build.
SPARC_BLD_1=    $(MACH:i386=$(POUND_SIGN))
SPARC_BLD=      $(SPARC_BLD_1:sparc=)
INTEL_BLD_1=    $(MACH:sparc=$(POUND_SIGN))
INTEL_BLD=      $(INTEL_BLD_1:i386=)

# The variables below control the compilers used during the build.
# There are a number of permutations.
#
# __GNUC and __SUNC control (and indicate) the primary compiler.  Whichever
# one is not POUND_SIGN is the primary, with the other as the shadow.  They
# may also be used to control entirely compiler-specific Makefile assignments.
# __GNUC and GCC are the default.
#
# __GNUC64 indicates that the 64bit build should use the GNU C compiler.
# There is no Sun C analogue.
#
# The following version-specific options are operative regardless of which
# compiler is primary, and control the versions of the given compilers to be
# used.  They also allow compiler-version specific Makefile fragments.
#

__SUNC=                 $(POUND_SIGN)
$(__SUNC)__GNUC=        $(POUND_SIGN)
__GNUC64=               $(__GNUC)

# Allow build-time "configuration" to enable or disable some things.
# The default is POUND_SIGN, meaning "not enabled". If the environment
# passes in an override like ENABLE_SMB_PRINTING= (empty) that will
# uncomment things in the lower Makefiles to enable the feature.
ENABLE_SMB_PRINTING=    $(POUND_SIGN)

# CLOSED is the root of the tree that contains source which isn’t released
# as open source
CLOSED=         $(SRC)/../closed

# BUILD_TOOLS is the root of all tools including compilers.
# ONBLD_TOOLS is the root of all the tools that are part of SUNWonbld.

BUILD_TOOLS=            /ws/onnv-tools
ONBLD_TOOLS=            $(BUILD_TOOLS)/onbld

# define runtime JAVA_HOME, primarily for cmd/pools/poold
JAVA_HOME=      /usr/java
# define buildtime JAVA_ROOT
JAVA_ROOT=      /usr/java
# Build uses java7 by default.  Pass one the variables below set to empty
# string in the environment to override.
```

```
BLD_JAVA_6=     $(POUND_SIGN)
BLD_JAVA_8=     $(POUND_SIGN)

GNUC_ROOT=      /opt/gcc/4.4.4
GCCLIBDIR=      $(GNUC_ROOT)/lib
GCCLIBDIR64=    $(GNUC_ROOT)/lib/$(MACH64)

DOCBOOK_XSL_ROOT=       /usr/share/sgml/docbook/xsl-stylesheets

RPCGEN=         /usr/bin/rpcgen
STABS=          $(ONBLD_TOOLS)/bin/$(MACH)/stabs
ELFEXTRACT=     $(ONBLD_TOOLS)/bin/$(MACH)/elfextract
MBH_PATCH=      $(ONBLD_TOOLS)/bin/$(MACH)/mbh_patch
BTXLD=          $(ONBLD_TOOLS)/bin/$(MACH)/btxld
VTFONTCVT=      $(ONBLD_TOOLS)/bin/$(MACH)/vtfontcvt
# echo(1) and true(1) are specified without absolute paths, so that the shell
# spawned by make(1) may use the built-in versions.  This is minimally
# problematic, as the shell spawned by make(1) is known and under control, the
# only risk being if the shell falls back to $PATH.
#
# We specifically want an echo(1) that does interpolation of escape sequences,
# which ksh93, /bin/sh, and bash will all provide.
ECHO=           echo
TRUE=           true
INS=            $(ONBLD_TOOLS)/bin/$(MACH)/install
SYMLINK=        /usr/bin/ln -s
LN=             /usr/bin/ln
MKDIR=          /usr/bin/mkdir
CHMOD=          /usr/bin/chmod
MV=             /usr/bin/mv -f
RM=             /usr/bin/rm -f
CUT=            /usr/bin/cut
NM=             /usr/ccs/bin/nm
DIFF=           /usr/bin/diff
GREP=           /usr/bin/grep
EGREP=          /usr/bin/egrep
ELFWRAP=        /usr/bin/elfwrap
KSH93=          /usr/bin/ksh93
SED=            /usr/bin/sed
AWK=            /usr/bin/nawk
CP=             /usr/bin/cp -f
MCS=            /usr/ccs/bin/mcs
CAT=            /usr/bin/cat
ELFDUMP=        /usr/ccs/bin/elfdump
M4=             /usr/bin/m4
GM4=            /usr/bin/gm4
STRIP=          /usr/ccs/bin/strip
LEX=            /usr/ccs/bin/lex
FLEX=           /usr/bin/flex
YACC=           /usr/ccs/bin/yacc
BISON=          /usr/bin/bison
CPP=            /usr/lib/cpp
ANSI_CPP=       $(GNUC_ROOT)/bin/cpp
JAVAC=          $(JAVA_ROOT)/bin/javac
JAVAH=          $(JAVA_ROOT)/bin/javah
JAVADOC=        $(JAVA_ROOT)/bin/javadoc
RMIC=           $(JAVA_ROOT)/bin/rmic
JAR=            $(JAVA_ROOT)/bin/jar
CTFCONVERT=     $(ONBLD_TOOLS)/bin/$(MACH)/ctfconvert
CTFDIFF=        $(ONBLD_TOOLS)/bin/$(MACH)/ctfdiff
CTFMERGE=       $(ONBLD_TOOLS)/bin/$(MACH)/ctfmerge
CTFSTABS=       $(ONBLD_TOOLS)/bin/$(MACH)/ctfstabs
CTFSTRIP=       $(ONBLD_TOOLS)/bin/$(MACH)/ctfstrip
NDRGEN=         $(ONBLD_TOOLS)/bin/$(MACH)/ndrgen
GENOFFSETS=     $(ONBLD_TOOLS)/bin/genoffsets
XREF=           $(ONBLD_TOOLS)/bin/xref
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FIND=           /usr/bin/find
PERL=           /usr/bin/perl
PERL_VERSION=   5.10.0
PERL_PKGVERS=   -510
PERL_ARCH =             i86pc-solaris-64int
$(SPARC_BLD)PERL_ARCH = sun4-solaris-64int
PYTHON_VERSION= 2.7
PYTHON_PKGVERS= -27
PYTHON_SUFFIX=
PYTHON=         /usr/bin/python$(PYTHON_VERSION)
PYTHON3_VERSION=        3.5
PYTHON3_PKGVERS=        -35
PYTHON3_SUFFIX=         m
PYTHON3=                /usr/bin/python$(PYTHON3_VERSION)
$(BUILDPY3TOOLS)TOOLS_PYTHON=           $(PYTHON3)
$(BUILDPY2TOOLS)TOOLS_PYTHON=           $(PYTHON)
SORT=           /usr/bin/sort
TR=             /usr/bin/tr
TOUCH=          /usr/bin/touch
WC=             /usr/bin/wc
XARGS=          /usr/bin/xargs
ELFEDIT=        /usr/bin/elfedit
DTRACE=         /usr/sbin/dtrace -xnolibs
UNIQ=           /usr/bin/uniq
TAR=            /usr/bin/tar
ASTBINDIR=      /usr/ast/bin
MSGCC=          $(ASTBINDIR)/msgcc
MSGFMT=         /usr/bin/msgfmt -s
LCDEF=          $(ONBLD_TOOLS)/bin/$(MACH)/localedef
TIC=            $(ONBLD_TOOLS)/bin/$(MACH)/tic
ZIC=            $(ONBLD_TOOLS)/bin/$(MACH)/zic
OPENSSL=        /usr/bin/openssl
CPCGEN=         $(ONBLD_TOOLS)/bin/$(MACH)/cpcgen

FILEMODE=       644
DIRMODE=        755

# Declare that nothing should be built in parallel.
# Individual Makefiles can use the .PARALLEL target to declare otherwise.
.NO_PARALLEL:

# For stylistic checks
#
# Note that the X and C checks are not used at this time and may need
# modification when they are actually used.
#
CSTYLE=         $(ONBLD_TOOLS)/bin/cstyle
CSTYLE_TAIL=
HDRCHK=         $(ONBLD_TOOLS)/bin/hdrchk
HDRCHK_TAIL=
JSTYLE=         $(ONBLD_TOOLS)/bin/jstyle

DOT_H_CHECK=    \
        @$(ECHO) "checking $<"; $(CSTYLE) $< $(CSTYLE_TAIL); \
        $(HDRCHK) $< $(HDRCHK_TAIL)

DOT_X_CHECK=    \
        @$(ECHO) "checking $<"; $(RPCGEN) -C -h $< | $(CSTYLE) $(CSTYLE_TAIL); \
        $(RPCGEN) -C -h $< | $(HDRCHK) $< $(HDRCHK_TAIL)

DOT_C_CHECK=    \
        @$(ECHO) "checking $<"; $(CSTYLE) $< $(CSTYLE_TAIL)

MANIFEST_CHECK= \
        @$(ECHO) "checking $<"; \
        SVCCFG_DTD=$(SRC)/cmd/svc/dtd/service_bundle.dtd.1 \
        SVCCFG_REPOSITORY=$(SRC)/cmd/svc/seed/global.db \
        SVCCFG_CONFIGD_PATH=$(SRC)/cmd/svc/configd/svc.configd-native \
        $(SRC)/cmd/svc/svccfg/svccfg-native validate $<

INS.file=       $(RM) $@; $(INS) -s -m $(FILEMODE) -f $(@D) $<
INS.dir=        $(INS) -s -d -m $(DIRMODE) $@
# installs and renames at once
#
INS.rename=     $(INS.file); $(MV) $(@D)/$(<F) $@

# install a link
INSLINKTARGET=  $<
INS.link=       $(RM) $@; $(LN) $(INSLINKTARGET) $@
INS.symlink=    $(RM) $@; $(SYMLINK) $(INSLINKTARGET) $@

# The path to python that will be used for the shebang line when installing
# python scripts to the proto area. This is overridden by makefiles to
# select to the correct version.
PYSHEBANG=      $(PYTHON)

#
# Python bakes the mtime of the .py file into the compiled .pyc and
# rebuilds if the baked-in mtime != the mtime of the source file
# (rather than only if it’s less than), thus when installing python
# files we must make certain to not adjust the mtime of the source
# (.py) file.
#
INS.pyfile=     $(RM) $@; $(SED) \
                -e "1s:^\#!@PYTHON@:\#!$(PYSHEBANG):" \
                -e "1s:^\#!@TOOLS_PYTHON@:\#!$(TOOLS_PYTHON):" \
                < $< > $@; $(CHMOD) $(FILEMODE) $@; $(TOUCH) -r $< $@

# MACH must be set in the shell environment per uname -p on the build host
# More specific architecture variables should be set in lower makefiles.
#
# MACH64 is derived from MACH, and BUILD64 is set to ‘#’ for
# architectures on which we do not build 64-bit versions.
# (There are no such architectures at the moment.)
#
# Set BUILD64=# in the environment to disable 64-bit amd64
# builds on i386 machines.

MACH64_1=       $(MACH:sparc=sparcv9)
MACH64=         $(MACH64_1:i386=amd64)

MACH32_1=       $(MACH:sparc=sparcv7)
MACH32=         $(MACH32_1:i386=i86)

sparc_BUILD64=
i386_BUILD64=
BUILD64=        $($(MACH)_BUILD64)

#
# C compiler mode. Future compilers may change the default on us,
# so force extended ANSI mode globally. Lower level makefiles can
# override this by setting CCMODE.
#
CCMODE=                 -Xa
CCMODE64=               -Xa

#
# C compiler verbose mode. This is so we can enable it globally,
# but turn it off in the lower level makefiles of things we cannot
# (or aren’t going to) fix.
#
CCVERBOSE=              -v
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# set this to the secret flag "-Wc,-Qiselect-v9abiwarn=1" to get warnings
# from the compiler about places the -xarch=v9 may differ from -xarch=v9c.
V9ABIWARN=

# set this to the secret flag "-Wc,-Qiselect-regsym=0" to disable register
# symbols (used to detect conflicts between objects that use global registers)
# we disable this now for safety, and because genunix doesn’t link with
# this feature (the v9 default) enabled.
#
# REGSYM is separate since the C++ driver syntax is different.
CCREGSYM=               -Wc,-Qiselect-regsym=0
CCCREGSYM=              -Qoption cg -Qiselect-regsym=0

# Prevent the removal of static symbols by the SPARC code generator (cg).
# The x86 code generator (ube) does not remove such symbols and as such
# using this workaround is not applicable for x86.
#
CCSTATICSYM=            -Wc,-Qassembler-ounrefsym=0
#
# generate 32-bit addresses in the v9 kernel. Saves memory.
CCABS32=                -Wc,-xcode=abs32
#
# generate v9 code which tolerates callers using the v7 ABI, for the sake of
# system calls.
CC32BITCALLERS=         -_gcc=-massume-32bit-callers

# GCC, especially, is increasingly beginning to auto-inline functions and
# sadly does so separately not under the general -fno-inline-functions
# Additionally, we wish to prevent optimisations which cause GCC to clone
# functions -- in particular, these may cause unhelpful symbols to be
# emitted instead of function names
CCNOAUTOINLINE= \
        -_gcc=-fno-inline-small-functions \
        -_gcc=-fno-inline-functions-called-once \
        -_gcc=-fno-ipa-cp \
        -_gcc7=-fno-ipa-icf \
        -_gcc8=-fno-ipa-icf \
        -_gcc7=-fno-clone-functions \
        -_gcc8=-fno-clone-functions

# GCC may put functions in different named sub-sections of .text based on
# their presumed calling frequency.  At least in the kernel, where we actually
# deliver relocatable objects, we don’t want this to happen.
#
# Since at present we don’t benefit from this even in userland, we disable it gl
# but the application of this may move into usr/src/uts/ in future.
CCNOREORDER=    \
        -_gcc7=-fno-reorder-functions \
        -_gcc8=-fno-reorder-functions

#
# gcc has a rather aggressive optimization on by default that infers loop
# bounds based on undefined behavior (!!).  This can lead to some VERY
# surprising optimizations -- ones that may be technically correct in the
# strictest sense but also result in incorrect program behavior.  We turn
# this optimization off, with extreme prejudice.
#
CCNOAGGRESSIVELOOPS= \
        -_gcc7=-fno-aggressive-loop-optimizations \
        -_gcc8=-fno-aggressive-loop-optimizations

# One optimization the compiler might perform is to turn this:
#       #pragma weak foo
#       extern int foo;
#       if (&foo)
#               foo = 5;
# into
#       foo = 5;
# Since we do some of this (foo might be referenced in common kernel code
# but provided only for some cpu modules or platforms), we disable this
# optimization.
#
sparc_CCUNBOUND = -Wd,-xsafe=unboundsym
i386_CCUNBOUND  =
CCUNBOUND       = $($(MACH)_CCUNBOUND)

#
# compiler '-xarch' flag. This is here to centralize it and make it
# overridable for testing.
sparc_XARCH=    -m32
sparcv9_XARCH=  -m64
i386_XARCH=     -m32
amd64_XARCH=    -m64 -Ui386 -U__i386

# assembler '-xarch' flag.  Different from compiler '-xarch' flag.
sparc_AS_XARCH=         -xarch=v8plus
sparcv9_AS_XARCH=       -xarch=v9
i386_AS_XARCH=
amd64_AS_XARCH=         -xarch=amd64 -P -Ui386 -U__i386

#
# These flags define what we need to be 'standalone' i.e. -not- part
# of the rather more cosy userland environment.  This basically means
# the kernel.
#
# XX64  future versions of gcc will make -mcmodel=kernel imply -mno-red-zone
#
sparc_STAND_FLAGS=      -_gcc=-ffreestanding
sparcv9_STAND_FLAGS=    -_gcc=-ffreestanding
# Disabling MMX also disables 3DNow, disabling SSE also disables all later
# additions to SSE (SSE2, AVX ,etc.)
NO_SIMD=                -_gcc=-mno-mmx -_gcc=-mno-sse
i386_STAND_FLAGS=       -_gcc=-ffreestanding $(NO_SIMD)
amd64_STAND_FLAGS=      -xmodel=kernel $(NO_SIMD)

SAVEARGS=               -Wu,-save_args
amd64_STAND_FLAGS       += $(SAVEARGS)

STAND_FLAGS_32 = $($(MACH)_STAND_FLAGS)
STAND_FLAGS_64 = $($(MACH64)_STAND_FLAGS)

#
# disable the incremental linker
ILDOFF=                 -xildoff
#
XFFLAG=                 -xF=%all
XESS=                   -xs
XSTRCONST=              -xstrconst

#
# turn warnings into errors (C)
CERRWARN = -errtags=yes -errwarn=%all
CERRWARN += -erroff=E_EMPTY_TRANSLATION_UNIT
CERRWARN += -erroff=E_STATEMENT_NOT_REACHED

CERRWARN += -_gcc=-Wno-missing-braces
CERRWARN += -_gcc=-Wno-sign-compare
CERRWARN += -_gcc=-Wno-unknown-pragmas
CERRWARN += -_gcc=-Wno-unused-parameter
CERRWARN += -_gcc=-Wno-missing-field-initializers
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# Unfortunately, this option can misfire very easily and unfixably.
CERRWARN +=     -_gcc=-Wno-array-bounds

# DEBUG v. -nd make for frequent unused variables, empty conditions, etc. in
# -nd builds
$(RELEASE_BUILD)CERRWARN += -_gcc=-Wno-unused
$(RELEASE_BUILD)CERRWARN += -_gcc=-Wno-empty-body

CERRWARN += -_smatch=-p=illumos_user
include $(SRC)/Makefile.smatch

#
# turn warnings into errors (C++)
CCERRWARN=              -xwe

# C standard.  Keep Studio flags until we get rid of lint.
CSTD_GNU89=     -xc99=%none
CSTD_GNU99=     -xc99=%all
CSTD=           $(CSTD_GNU89)
C99LMODE=       $(CSTD:-xc99%=-Xc99%)

# In most places, assignments to these macros should be appended with +=
# (CPPFLAGS.first allows values to be prepended to CPPFLAGS).
sparc_CFLAGS=   $(sparc_XARCH) $(CCSTATICSYM)
sparcv9_CFLAGS= $(sparcv9_XARCH) -dalign $(CCVERBOSE) $(V9ABIWARN) $(CCREGSYM) \
                $(CCSTATICSYM)
i386_CFLAGS=    $(i386_XARCH)
amd64_CFLAGS=   $(amd64_XARCH)

sparc_ASFLAGS=  $(sparc_AS_XARCH)
sparcv9_ASFLAGS=$(sparcv9_AS_XARCH)
i386_ASFLAGS=   $(i386_AS_XARCH)
amd64_ASFLAGS=  $(amd64_AS_XARCH)

#
sparc_COPTFLAG=         -xO3
sparcv9_COPTFLAG=       -xO3
i386_COPTFLAG=          -O
amd64_COPTFLAG=         -xO3

COPTFLAG= $($(MACH)_COPTFLAG)
COPTFLAG64= $($(MACH64)_COPTFLAG)

# When -g is used, the compiler globalizes static objects
# (gives them a unique prefix). Disable that.
CNOGLOBAL= -W0,-noglobal

# Direct the Sun Studio compiler to use a static globalization prefix based on t
# name of the module rather than something unique. Otherwise, objects
# will not build deterministically, as subsequent compilations of identical
# source will yeild objects that always look different.
#
# In the same spirit, this will also remove the date from the N_OPT stab.
CGLOBALSTATIC= -W0,-xglobalstatic

# Sometimes we want all symbols and types in debugging information even
# if they aren't used.
CALLSYMS=       -W0,-xdbggen=no%usedonly

#
# We force the compilers to generate the debugging information best understood
# by the CTF tools.  With Sun Studio this is stabs due to bugs in the Studio
# compilers.  With GCC this is DWARF v2.
#
DEBUGFORMAT=    -_cc=-xdebugformat=stabs -_gcc=-gdwarf-2
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#
# Ask the compiler to include debugging information
#
CCGDEBUG= -g $(DEBUGFORMAT)

#
# Flags used to build in debug mode for ctf generation.
#
CTF_FLAGS_sparc = $(CCGDEBUG) -Wc,-Qiselect-T1 $(CSTD) $(CNOGLOBAL)
CTF_FLAGS_i386  = $(CCGDEBUG) $(CSTD) $(CNOGLOBAL)

CTF_FLAGS_sparcv9       = $(CTF_FLAGS_sparc)
CTF_FLAGS_amd64         = $(CTF_FLAGS_i386)

# Sun Studio produces broken userland code when saving arguments.
$(__GNUC)CTF_FLAGS_amd64 += $(SAVEARGS)

CTF_FLAGS_32    = $(CTF_FLAGS_$(MACH))
CTF_FLAGS_64    = $(CTF_FLAGS_$(MACH64))
CTF_FLAGS       = $(CTF_FLAGS_32)

#
# Flags used with genoffsets
#
GENOFFSETS_FLAGS = $(CALLSYMS)

OFFSETS_CREATE = $(GENOFFSETS) -s $(CTFSTABS) -r $(CTFCONVERT) \
        $(CW) --noecho $(CW_CC_COMPILERS) -- $(GENOFFSETS_FLAGS) \
        $(CFLAGS) $(CPPFLAGS)

OFFSETS_CREATE64 = $(GENOFFSETS) -s $(CTFSTABS) -r $(CTFCONVERT) \
        $(CW) --noecho $(CW_CC_COMPILERS) -- $(GENOFFSETS_FLAGS) \
        $(CFLAGS64) $(CPPFLAGS)

#
# tradeoff time for space (smaller is better)
#
sparc_SPACEFLAG         = -xspace -W0,-Lt
sparcv9_SPACEFLAG       = -xspace -W0,-Lt
i386_SPACEFLAG          = -xspace
amd64_SPACEFLAG         =

SPACEFLAG               = $($(MACH)_SPACEFLAG)
SPACEFLAG64             = $($(MACH64)_SPACEFLAG)

#
# The Sun Studio 11 compiler has changed the behaviour of integer
# wrap arounds and so a flag is needed to use the legacy behaviour
# (without this flag panics/hangs could be exposed within the source).
#
sparc_IROPTFLAG         = -W2,-xwrap_int
sparcv9_IROPTFLAG       = -W2,-xwrap_int
i386_IROPTFLAG          =
amd64_IROPTFLAG         =

IROPTFLAG               = $($(MACH)_IROPTFLAG)
IROPTFLAG64             = $($(MACH64)_IROPTFLAG)

sparc_XREGSFLAG         = -xregs=no%appl
sparcv9_XREGSFLAG       = -xregs=no%appl
i386_XREGSFLAG          =
amd64_XREGSFLAG         =

XREGSFLAG               = $($(MACH)_XREGSFLAG)
XREGSFLAG64             = $($(MACH64)_XREGSFLAG)
```

```
# dmake SOURCEDEBUG=yes ... enables source-level debugging information, and
# avoids stripping it.
SOURCEDEBUG     = $(POUND_SIGN)
SRCDBGBLD       = $(SOURCEDEBUG:yes=)

#
# These variables are intended ONLY for use by developers to safely pass extra
# flags to the compilers without unintentionally overriding Makefile-set
# flags.  They should NEVER be set to any value in a Makefile.
#
# They come last in the associated FLAGS variable such that they can
# explicitly override things if necessary, there are gaps in this, but it’s
# the best we can manage.
#
CUSERFLAGS              =
CUSERFLAGS64            = $(CUSERFLAGS)
CCUSERFLAGS             =
CCUSERFLAGS64           = $(CCUSERFLAGS)

CSOURCEDEBUGFLAGS       =
CCSOURCEDEBUGFLAGS      =
$(SRCDBGBLD)CSOURCEDEBUGFLAGS   = $(CCGDEBUG) -xs
$(SRCDBGBLD)CCSOURCEDEBUGFLAGS  = $(CCGDEBUG) -xs

CFLAGS=         $(COPTFLAG) $($(MACH)_CFLAGS) $(SPACEFLAG) $(CCMODE) \
                $(ILDOFF) $(CERRWARN) $(CSTD) $(CCUNBOUND) $(IROPTFLAG) \
                $(CGLOBALSTATIC) $(CCNOAUTOINLINE) $(CCNOREORDER) \
                $(CCNOAGGRESSIVELOOPS) \
                $(CSOURCEDEBUGFLAGS) $(CUSERFLAGS)
CFLAGS64=       $(COPTFLAG64) $($(MACH64)_CFLAGS) $(SPACEFLAG64) $(CCMODE64) \
                $(ILDOFF) $(CERRWARN) $(CSTD) $(CCUNBOUND) $(IROPTFLAG64) \
                $(CGLOBALSTATIC) $(CCNOAUTOINLINE) $(CCNOREORDER) \
                $(CCNOAGGRESSIVELOOPS) \
                $(CSOURCEDEBUGFLAGS) $(CUSERFLAGS64)
#
# Flags that are used to build parts of the code that are subsequently
# run on the build machine (also known as the NATIVE_BUILD).
#
NATIVE_CFLAGS=  $(COPTFLAG) $($(NATIVE_MACH)_CFLAGS) $(CCMODE) \
                $(ILDOFF) $(CERRWARN) $(CSTD) $($(NATIVE_MACH)_CCUNBOUND) \
                $(IROPTFLAG) $(CGLOBALSTATIC) $(CCNOAUTOINLINE) \
                $(CCNOREORDER) $(CSOURCEDEBUGFLAGS) $(CUSERFLAGS)

DTEXTDOM=-DTEXT_DOMAIN=\"$(TEXT_DOMAIN)\"       # For messaging.
DTS_ERRNO=-D_TS_ERRNO
CPPFLAGS.first= # Please keep empty.  Only lower makefiles should set this.
CPPFLAGS.master=$(DTEXTDOM) $(DTS_ERRNO) \
        $(ENVCPPFLAGS1) $(ENVCPPFLAGS2) $(ENVCPPFLAGS3) $(ENVCPPFLAGS4) \
        $(ADJUNCT_PROTO:%=-I%/usr/include)
CPPFLAGS.native=$(ENVCPPFLAGS1) $(ENVCPPFLAGS2) $(ENVCPPFLAGS3) \
                $(ENVCPPFLAGS4) -I$(NATIVE_ADJUNCT)/include
CPPFLAGS=       $(CPPFLAGS.first) $(CPPFLAGS.master)
AS_CPPFLAGS=    $(CPPFLAGS.first) $(CPPFLAGS.master)
JAVAFLAGS=      -source 1.6 -target 1.6 -Xlint:deprecation,-options

#
# For source message catalogue
#
.SUFFIXES: $(SUFFIXES) .i .po
MSGROOT= $(ROOT)/catalog
MSGDOMAIN= $(MSGROOT)/$(TEXT_DOMAIN)
MSGDOMAINPOFILE = $(MSGDOMAIN)/$(POFILE)
DCMSGDOMAIN= $(MSGROOT)/LC_TIME/$(TEXT_DOMAIN)
DCMSGDOMAINPOFILE = $(DCMSGDOMAIN)/$(DCFILE:.dc=.po)

CLOBBERFILES += $(POFILE) $(POFILES)
```

```
COMPILE.cpp= $(CC) -E -C $(CFLAGS) $(CPPFLAGS)
XGETTEXT= /usr/bin/xgettext
XGETFLAGS= -c TRANSLATION_NOTE
GNUXGETTEXT= /usr/gnu/bin/xgettext
GNUXGETFLAGS= --add-comments=TRANSLATION_NOTE --keyword=_ \
        --strict --no-location --omit-header
BUILD.po= $(XGETTEXT) $(XGETFLAGS) -d $(<F) $<.i ;\
        $(RM)   $@ ;\
        $(SED) "/^domain/d" < $(<F).po > $@ ;\
        $(RM) $(<F).po $<.i

#
# This is overwritten by local Makefile when PROG is a list.
#
POFILE= $(PROG).po

sparc_CCFLAGS=          -cg92 -compat=4 \
                        -Qoption ccfe -messages=no%anachronism \
                        $(CCERRWARN)
sparcv9_CCFLAGS=        $(sparcv9_XARCH) -dalign -compat=5 \
                        -Qoption ccfe -messages=no%anachronism \
                        -Qoption ccfe -features=no%conststrings \
                        $(CCCREGSYM) \
                        $(CCERRWARN)
i386_CCFLAGS=           -compat=4 \
                        -Qoption ccfe -messages=no%anachronism \
                        -Qoption ccfe -features=no%conststrings \
                        $(CCERRWARN)
amd64_CCFLAGS=          $(amd64_XARCH) -compat=5 \
                        -Qoption ccfe -messages=no%anachronism \
                        -Qoption ccfe -features=no%conststrings \
                        $(CCERRWARN)

sparc_CCOPTFLAG=        -O
sparcv9_CCOPTFLAG=      -O
i386_CCOPTFLAG=         -O
amd64_CCOPTFLAG=        -O

CCOPTFLAG=      $($(MACH)_CCOPTFLAG)
CCOPTFLAG64=    $($(MACH64)_CCOPTFLAG)
CCFLAGS=        $(CCOPTFLAG) $($(MACH)_CCFLAGS) $(CCSOURCEDEBUGFLAGS) \
                $(CCUSERFLAGS)
CCFLAGS64=      $(CCOPTFLAG64) $($(MACH64)_CCFLAGS) $(CCSOURCEDEBUGFLAGS) \
                $(CCUSERFLAGS64)

#
#
#
ELFWRAP_FLAGS   =
ELFWRAP_FLAGS64 =       -64

#
# Various mapfiles that are used throughout the build, and delivered to
# /usr/lib/ld.
#
MAPFILE.NED_i386 =      $(SRC)/common/mapfiles/common/map.noexdata
MAPFILE.NED_sparc =
MAPFILE.NED =           $(MAPFILE.NED_$(MACH))
MAPFILE.PGA =           $(SRC)/common/mapfiles/common/map.pagealign
MAPFILE.NES =           $(SRC)/common/mapfiles/common/map.noexstk
MAPFILE.FLT =           $(SRC)/common/mapfiles/common/map.filter
MAPFILE.LEX =           $(SRC)/common/mapfiles/common/map.lex.yy

#
# Generated mapfiles that are compiler specific, and used throughout the
# build.  These mapfiles are not delivered in /usr/lib/ld.
```

```
#
MAPFILE.NGB_sparc=      $(SRC)/common/mapfiles/gen/sparc_cc_map.noexeglobs
$(__GNUC64)MAPFILE.NGB_sparc= \
                        $(SRC)/common/mapfiles/gen/sparc_gcc_map.noexeglobs
MAPFILE.NGB_sparcv9=    $(SRC)/common/mapfiles/gen/sparcv9_cc_map.noexeglobs
$(__GNUC64)MAPFILE.NGB_sparcv9= \
                        $(SRC)/common/mapfiles/gen/sparcv9_gcc_map.noexeglobs
MAPFILE.NGB_i386=       $(SRC)/common/mapfiles/gen/i386_cc_map.noexeglobs
$(__GNUC64)MAPFILE.NGB_i386= \
                        $(SRC)/common/mapfiles/gen/i386_gcc_map.noexeglobs
MAPFILE.NGB_amd64=      $(SRC)/common/mapfiles/gen/amd64_cc_map.noexeglobs
$(__GNUC64)MAPFILE.NGB_amd64= \
                        $(SRC)/common/mapfiles/gen/amd64_gcc_map.noexeglobs
MAPFILE.NGB =           $(MAPFILE.NGB_$(MACH))

#
# A generic interface mapfile name, used by various dynamic objects to define
# the interfaces and interposers the object must export.
#
MAPFILE.INT =           mapfile-intf

#
# LDLIBS32 and LDLIBS64 can be set in the environment to override the following
# assignments.
#
# These environment settings make sure that no libraries are searched outside
# of the local workspace proto area:
#       LDLIBS32=-YP,$ROOT/lib:$ROOT/usr/lib
#       LDLIBS64=-YP,$ROOT/lib/$MACH64:$ROOT/usr/lib/$MACH64
#
LDLIBS32 =      $(ENVLDLIBS1) $(ENVLDLIBS2) $(ENVLDLIBS3)
LDLIBS32 +=     $(ADJUNCT_PROTO:%=-L%/usr/lib -L%/lib)
LDLIBS.cmd =    $(LDLIBS32)
LDLIBS.lib =    $(LDLIBS32)

LDLIBS64 =      $(ENVLDLIBS1:%=%/$(MACH64)) \
                $(ENVLDLIBS2:%=%/$(MACH64)) \
                $(ENVLDLIBS3:%=%/$(MACH64))
LDLIBS64 +=     $(ADJUNCT_PROTO:%=-L%/usr/lib/$(MACH64) -L%/lib/$(MACH64))

#
# Define compilation macros.
#
COMPILE.c=      $(CC) $(CFLAGS) $(CPPFLAGS) -c
COMPILE64.c=    $(CC) $(CFLAGS64) $(CPPFLAGS) -c
COMPILE.cc=     $(CCC) $(CCFLAGS) $(CPPFLAGS) -c
COMPILE64.cc=   $(CCC) $(CCFLAGS64) $(CPPFLAGS) -c
COMPILE.s=      $(AS) $(ASFLAGS) $(AS_CPPFLAGS)
COMPILE64.s=    $(AS) $(ASFLAGS) $($(MACH64)_AS_XARCH) $(AS_CPPFLAGS)
COMPILE.d=      $(DTRACE) -G -32
COMPILE64.d=    $(DTRACE) -G -64
COMPILE.b=      $(ELFWRAP) $(ELFWRAP_FLAGS$(CLASS))
COMPILE64.b=    $(ELFWRAP) $(ELFWRAP_FLAGS$(CLASS))

CLASSPATH=      .
COMPILE.java=   $(JAVAC) $(JAVAFLAGS) -classpath $(CLASSPATH)

#
# Link time macros
#
CCNEEDED                = -lC
CCEXTNEEDED             = -lCrun -lCstd
$(__GNUC)CCNEEDED       = -L$(GCCLIBDIR) -lstdc++ -lgcc_s
$(__GNUC)CCEXTNEEDED    = $(CCNEEDED)

LINK.c=         $(CC) $(CFLAGS) $(CPPFLAGS) $(LDFLAGS)
```

```
LINK64.c=       $(CC) $(CFLAGS64) $(CPPFLAGS) $(LDFLAGS)
NORUNPATH=      -norunpath -nolib
LINK.cc=        $(CCC) $(CCFLAGS) $(CPPFLAGS) $(NORUNPATH) \
                $(LDFLAGS) $(CCNEEDED)
LINK64.cc=      $(CCC) $(CCFLAGS64) $(CPPFLAGS) $(NORUNPATH) \
                $(LDFLAGS) $(CCNEEDED)

#
# lint macros
#
# Note that the undefine of __PRAGMA_REDEFINE_EXTNAME can be removed once
# ON is built with a version of lint that has the fix for 4484186.
#
ALWAYS_LINT_DEFS =      -errtags=yes -s
ALWAYS_LINT_DEFS +=     -erroff=E_PTRDIFF_OVERFLOW
ALWAYS_LINT_DEFS +=     -erroff=E_ASSIGN_NARROW_CONV
ALWAYS_LINT_DEFS +=     -U__PRAGMA_REDEFINE_EXTNAME
ALWAYS_LINT_DEFS +=     $(C99LMODE)
ALWAYS_LINT_DEFS +=     -errsecurity=$(SECLEVEL)
ALWAYS_LINT_DEFS +=     -erroff=E_SEC_CREAT_WITHOUT_EXCL
ALWAYS_LINT_DEFS +=     -erroff=E_SEC_FORBIDDEN_WARN_CREAT
# XX64 -- really only needed for amd64 lint
ALWAYS_LINT_DEFS +=     -erroff=E_ASSIGN_INT_TO_SMALL_INT
ALWAYS_LINT_DEFS +=     -erroff=E_CAST_INT_CONST_TO_SMALL_INT
ALWAYS_LINT_DEFS +=     -erroff=E_CAST_INT_TO_SMALL_INT
ALWAYS_LINT_DEFS +=     -erroff=E_CAST_TO_PTR_FROM_INT
ALWAYS_LINT_DEFS +=     -erroff=E_COMP_INT_WITH_LARGE_INT
ALWAYS_LINT_DEFS +=     -erroff=E_INTEGRAL_CONST_EXP_EXPECTED
ALWAYS_LINT_DEFS +=     -erroff=E_PASS_INT_TO_SMALL_INT
ALWAYS_LINT_DEFS +=     -erroff=E_PTR_CONV_LOSES_BITS

# This forces lint to pick up note.h and sys/note.h from Devpro rather than
# from the proto area.  The note.h that ON delivers would disable NOTE().
ONLY_LINT_DEFS =        -I$(SPRO_VROOT)/prod/include/lint

SECLEVEL=       core
LINT.c=         $(LINT) $(ONLY_LINT_DEFS) $(LINTFLAGS) $(CPPFLAGS) \
                $(ALWAYS_LINT_DEFS)
LINT64.c=       $(LINT) $(ONLY_LINT_DEFS) $(LINTFLAGS64) $(CPPFLAGS) \
                $(ALWAYS_LINT_DEFS)
LINT.s=         $(LINT.c)

# For some future builds, NATIVE_MACH and MACH might be different.
# Therefore, NATIVE_MACH needs to be redefined in the
# environment as ‘uname -p‘ to override this macro.
#
# For now at least, we cross-compile amd64 on i386 machines.
NATIVE_MACH=    $(MACH:amd64=i386)

# Define native compilation macros
#

# Base directory where compilers are loaded.
# Defined here so it can be overridden by developer.
#
SPRO_ROOT=              $(BUILD_TOOLS)/SUNWspro
SPRO_VROOT=             $(SPRO_ROOT)/SS12
GNU_ROOT=               /usr

$(__GNUC)PRIMARY_CC=    gcc4,$(GNUC_ROOT)/bin/gcc,gnu
$(__SUNC)PRIMARY_CC=    studio12,$(SPRO_VROOT)/bin/cc,sun
$(__GNUC)PRIMARY_CCC=   gcc4,$(GNUC_ROOT)/bin/g++,gnu
$(__SUNC)PRIMARY_CCC=   studio12,$(SPRO_VROOT)/bin/CC,sun

CW_CC_COMPILERS=        $(PRIMARY_CC:%=--primary %) $(SHADOW_CCS:%=--shadow %)
CW_CCC_COMPILERS=       $(PRIMARY_CCC:%=--primary %) $(SHADOW_CCCS:%=--shadow %)
```

```
# Till SS12u1 formally becomes the NV CBE, LINT is hard
# coded to be picked up from the $SPRO_ROOT/sunstudio12.1/
# location. Impacted variables are sparc_LINT, sparcv9_LINT,
# i386_LINT, amd64_LINT.
# Reset them when SS12u1 is rolled out.
#

# Specify platform compiler versions for languages
# that we use (currently only c and c++).
#
CW=                     $(ONBLD_TOOLS)/bin/$(MACH)/cw

BUILD_CC=               $(CW) $(CW_CC_COMPILERS) --
BUILD_CCC=              $(CW) -C $(CW_CCC_COMPILERS) --
BUILD_CPP=              /usr/ccs/lib/cpp
BUILD_LD=               /usr/ccs/bin/ld
BUILD_LINT=             $(SPRO_ROOT)/sunstudio12.1/bin/lint

$(MACH)_CC=             $(BUILD_CC)
$(MACH)_CCC=            $(BUILD_CCC)
$(MACH)_CPP=            $(BUILD_CPP)
$(MACH)_LD=             $(BUILD_LD)
$(MACH)_LINT=           $(BUILD_LINT)
$(MACH64)_CC=           $(BUILD_CC)
$(MACH64)_CCC=          $(BUILD_CCC)
$(MACH64)_CPP=          $(BUILD_CPP)
$(MACH64)_LD=           $(BUILD_LD)
$(MACH64)_LINT=         $(BUILD_LINT)

sparc_AS=               /usr/ccs/bin/as -xregsym=no
sparcv9_AS=             $($(MACH)_AS)

i386_AS=                /usr/ccs/bin/as
$(__GNUC)i386_AS=       $(ONBLD_TOOLS)/bin/$(MACH)/aw
amd64_AS=               $(ONBLD_TOOLS)/bin/$(MACH)/aw

NATIVECC=               $($(NATIVE_MACH)_CC)
NATIVECCC=              $($(NATIVE_MACH)_CCC)
NATIVECPP=              $($(NATIVE_MACH)_CPP)
NATIVEAS=               $($(NATIVE_MACH)_AS)
NATIVELD=               $($(NATIVE_MACH)_LD)
NATIVELINT=             $($(NATIVE_MACH)_LINT)

#
# Makefile.master.64 overrides these settings
#
CC=                     $(NATIVECC)
CCC=                    $(NATIVECCC)
CPP=                    $(NATIVECPP)
AS=                     $(NATIVEAS)
LD=                     $(NATIVELD)
LINT=                   $(NATIVELINT)

# Pass -Y flag to cpp (method of which is release-dependent)
CCYFLAG=                -Y I,

BDIRECT=        -Bdirect
BDYNAMIC=       -Bdynamic
BLOCAL=         -Blocal
BNODIRECT=      -Bnodirect
BREDUCE=        -Breduce
BSTATIC=        -Bstatic

ZDEFS=          -zdefs
```

```
ZDIRECT=        -zdirect
ZIGNORE=        -zignore
ZINITFIRST=     -zinitfirst
ZINTERPOSE=     -zinterpose
ZLAZYLOAD=      -zlazyload
ZLOADFLTR=      -zloadfltr
ZMULDEFS=       -zmuldefs
ZNODEFAULTLIB=  -znodefaultlib
ZNODEFS=        -znodefs
ZNODELETE=      -znodelete
ZNODLOPEN=      -znodlopen
ZNODUMP=        -znodump
ZNOLAZYLOAD=    -znolazyload
ZNOLDYNSYM=     -znoldynsym
ZNORELOC=       -znoreloc
ZNOVERSION=     -znoversion
ZRECORD=        -zrecord
ZREDLOCSYM=     -zredlocsym
ZTEXT=          -ztext
ZVERBOSE=       -zverbose

GSHARED=        -G
CCMT=           -mt

# Handle different PIC models on different ISAs
# (May be overridden by lower-level Makefiles)

sparc_C_PICFLAGS =      -fpic
sparcv9_C_PICFLAGS =    -fpic
i386_C_PICFLAGS =       -fpic
amd64_C_PICFLAGS =      -fpic
C_PICFLAGS =            $($(MACH)_C_PICFLAGS)
C_PICFLAGS64 =          $($(MACH64)_C_PICFLAGS)

sparc_C_BIGPICFLAGS =   -fPIC
sparcv9_C_BIGPICFLAGS = -fPIC
i386_C_BIGPICFLAGS =    -fPIC
amd64_C_BIGPICFLAGS =   -fPIC
C_BIGPICFLAGS =         $($(MACH)_C_BIGPICFLAGS)
C_BIGPICFLAGS64 =       $($(MACH64)_C_BIGPICFLAGS)

# CC requires there to be no space between '-K' and 'pic' or 'PIC'.
# and does not support -f
sparc_CC_PICFLAGS =     -_cc=-Kpic -_gcc=-fpic
sparcv9_CC_PICFLAGS =   -_cc=-KPIC -_gcc=-fPIC
i386_CC_PICFLAGS =      -_cc=-Kpic -_gcc=-fpic
amd64_CC_PICFLAGS =     -_cc=-Kpic -_gcc=-fpic
CC_PICFLAGS =           $($(MACH)_CC_PICFLAGS)
CC_PICFLAGS64 =         $($(MACH64)_CC_PICFLAGS)

AS_PICFLAGS=            -K pic
AS_BIGPICFLAGS=         -K PIC

#
# Default label for CTF sections
#
CTFCVTFLAGS=            -i -L VERSION

#
# Override to pass module-specific flags to ctfmerge.  Currently used only by
# krtld to turn on fuzzy matching, and source-level debugging to inhibit
# stripping.
#
CTFMRGFLAGS=

#
```

```
# Make the transition between old and new CTF Tools. The new ctf tools
# do not support stabs (eg. Sun Studio). By setting BUILD_OLD_CTF_TOOLS
# here or in the environment file, the old ones will be built.
#
BUILD_NEW_CTF_TOOLS=
BUILD_OLD_CTF_TOOLS=$(POUND_SIGN)
$(BUILD_OLD_CTF_TOOLS)BUILD_NEW_CTF_TOOLS= $(POUND_SIGN)

CTFCONVERT_O            = $(CTFCONVERT) $(CTFCVTFLAGS) $@

# Rules (normally from make.rules) and macros which are used for post
# processing files. Normally, these do stripping of the comment section
# automatically.
#    RELEASE_CM:        Should be editted to reflect the release.
#    POST_PROCESS_O:    Post-processing for '.o' files.
#    POST_PROCESS_A:    Post-processing for '.a' files (currently null).
#    POST_PROCESS_SO:   Post-processing for '.so' files.
#    POST_PROCESS:      Post-processing for executable files (no suffix).
# Note that these macros are not completely generalized as they are to be
# used with the file name to be processed following.
#
# It is left as an exercise to Release Engineering to embellish the generation
# of the release comment string.
#
#       If this is a standard development build:
#               compress the comment section (mcs -c)
#               add the standard comment (mcs -a $(RELEASE_CM))
#               add the development specific comment (mcs -a $(DEV_CM))
#
#       If this is an installation build:
#               delete the comment section (mcs -d)
#               add the standard comment (mcs -a $(RELEASE_CM))
#               add the development specific comment (mcs -a $(DEV_CM))
#
#       If this is an release build:
#               delete the comment section (mcs -d)
#               add the standard comment (mcs -a $(RELEASE_CM))
#
# The following list of macros are used in the definition of RELEASE_CM
# which is used to label all binaries in the build:
#
#       RELEASE         Specific release of the build, eg: 5.2
#       RELEASE_MAJOR   Major version number part of $(RELEASE)
#       RELEASE_MINOR   Minor version number part of $(RELEASE)
#       VERSION         Version of the build (alpha, beta, Generic)
#       PATCHID         If this is a patch this value should contain
#                       the patchid value (eg: "Generic 100832-01"), otherwise
#                       it will be set to $(VERSION)
#       RELEASE_DATE    Date of the Release Build
#       PATCH_DATE      Date the patch was created, if this is blank it
#                       will default to the RELEASE_DATE
#
RELEASE_MAJOR=  5
RELEASE_MINOR=  11
RELEASE=        $(RELEASE_MAJOR).$(RELEASE_MINOR)
VERSION=        SunOS Development
PATCHID=        $(VERSION)
RELEASE_DATE=   release date not set
PATCH_DATE=     $(RELEASE_DATE)
RELEASE_CM=     "@($(POUND_SIGN))SunOS $(RELEASE) $(PATCHID) $(PATCH_DATE)"
DEV_CM=         "@($(POUND_SIGN))SunOS Internal Development: non-nightly build"

PROCESS_COMMENT=  @?${MCS} -d -a $(RELEASE_CM) -a $(DEV_CM)
$(RELEASE_BUILD)PROCESS_COMMENT=   @?${MCS} -d -a $(RELEASE_CM)

STRIP_STABS=                       $(STRIP) -x $@
```

```
$(SRCDBGBLD)STRIP_STABS=           :

POST_PROCESS_O=
POST_PROCESS_A=
POST_PROCESS_SO=        $(PROCESS_COMMENT) $@ ; $(STRIP_STABS) ; \
                        $(ELFSIGN_OBJECT)
POST_PROCESS=           $(PROCESS_COMMENT) $@ ; $(STRIP_STABS) ; \
                        $(ELFSIGN_OBJECT)

#
# chk4ubin is a tool that inspects a module for a symbol table
# ELF section size which can trigger an OBP bug on older platforms.
# This problem affects only specific sun4u bootable modules.
#
CHK4UBIN=       $(ONBLD_TOOLS)/bin/$(MACH)/chk4ubin
CHK4UBINFLAGS=
CHK4UBINARY=    $(CHK4UBIN) $(CHK4UBINFLAGS) $@

#
# PKGARCHIVE specifies the default location where packages should be
# placed if built.
#
$(RELEASE_BUILD)PKGARCHIVESUFFIX=       -nd
PKGARCHIVE=$(SRC)/../../packages/$(MACH)/nightly$(PKGARCHIVESUFFIX)

#
# The repositories will be created with these publisher settings.  To
# update an image to the resulting repositories, this must match the
# publisher name provided to "pkg set-publisher."
#
PKGPUBLISHER_REDIST=    on-nightly
PKGPUBLISHER_NONREDIST= on-extra

#       Default build rules which perform comment section post-processing.
#
.c:
        $(LINK.c) -o $@ $< $(LDLIBS)
        $(POST_PROCESS)
.c.o:
        $(COMPILE.c) $(OUTPUT_OPTION) $< $(CTFCONVERT_HOOK)
        $(POST_PROCESS_O)
.c.a:
        $(COMPILE.c) -o $% $<
        $(PROCESS_COMMENT) $%
        $(AR) $(ARFLAGS) $@ $%
        $(RM) $%
.s.o:
        $(COMPILE.s) -o $@ $<
        $(POST_PROCESS_O)
.s.a:
        $(COMPILE.s) -o $% $<
        $(PROCESS_COMMENT) $%
        $(AR) $(ARFLAGS) $@ $%
        $(RM) $%
.cc:
        $(LINK.cc) -o $@ $< $(LDLIBS)
        $(POST_PROCESS)
.cc.o:
        $(COMPILE.cc) $(OUTPUT_OPTION) $<
        $(POST_PROCESS_O)
.cc.a:
        $(COMPILE.cc) -o $% $<
        $(AR) $(ARFLAGS) $@ $%
        $(PROCESS_COMMENT) $%
        $(RM) $%
.y:
```

```
        $(YACC.y) $<
        $(LINK.c) -o $@ y.tab.c $(LDLIBS)
        $(POST_PROCESS)
        $(RM) y.tab.c
.y.o:
        $(YACC.y) $<
        $(COMPILE.c) -o $@ y.tab.c $(CTFCONVERT_HOOK)
        $(POST_PROCESS_O)
        $(RM) y.tab.c
.l:
        $(RM) $*.c
        $(LEX.l) $< > $*.c
        $(LINK.c) -o $@ $*.c -ll $(LDLIBS)
        $(POST_PROCESS)
        $(RM) $*.c
.l.o:
        $(RM) $*.c
        $(LEX.l) $< > $*.c
        $(COMPILE.c) -o $@ $*.c $(CTFCONVERT_HOOK)
        $(POST_PROCESS_O)
        $(RM) $*.c

.bin.o:
        $(COMPILE.b) -o $@ $<
        $(POST_PROCESS_O)

.java.class:
        $(COMPILE.java) $<

# Bourne and Korn shell script message catalog build rules.
# We extract all gettext strings with sed(1) (being careful to permit
# multiple gettext strings on the same line), weed out the dups, and
# build the catalogue with awk(1).

.sh.po .ksh.po:
        $(SED) -n -e ":a"                                       \
                  -e "h"                                        \
                  -e "s/.*gettext *\(\"[^\"]*\"\).*/\1/p"       \
                  -e "x"                                        \
                  -e "s/\(.*\)gettext *\"[^\"]*\"\(.*\)/\1\2/"  \
                  -e "t a"                                      \
               $< | sort -u | $(AWK) '{ print "msgid\t" $$0 "\nmsgstr" }' > $@

#
# Python and Perl executable and message catalog build rules.
#
.SUFFIXES: .pl .pm .py .pyc

.pl:
        $(RM) $@;
        $(SED) -e "s@TEXT_DOMAIN@\"$(TEXT_DOMAIN)\"@" $< > $@;
        $(CHMOD) +x $@

.py:
        $(RM) $@; $(SED) \
                -e "1s:^\#!@PYTHON@:\#!$(PYSHEBANG):" \
                -e "1s:^\#!@TOOLS_PYTHON@:\#!$(TOOLS_PYTHON):" \
                < $< > $@; $(CHMOD) +x $@

.py.pyc:
        $(RM) $@
        $(PYTHON) -mpy_compile $<
        @[ $(<)c = $@ ] || $(MV) $(<)c $@

.py.po:
        $(GNUXGETTEXT) $(GNUXGETFLAGS) -d $(<F:%.py=%) $< ;
```

```
.pl.po .pm.po:
        $(XGETTEXT) $(XGETFLAGS) -d $(<F) $< ;
        $(RM)   $@ ;
        $(SED) "/^domain/d" < $(<F).po > $@ ;
        $(RM) $(<F).po

#
# When using xgettext, we want messages to go to the default domain,
# rather than the specified one.  This special version of the
# COMPILE.cpp macro effectively prevents expansion of TEXT_DOMAIN,
# causing xgettext to put all messages into the default domain.
#
CPPFORPO=$(COMPILE.cpp:\"$(TEXT_DOMAIN)\"=TEXT_DOMAIN)

.c.i:
        $(CPPFORPO) $< > $@

.h.i:
        $(CPPFORPO) $< > $@

.y.i:
        $(YACC) -d $<
        $(CPPFORPO) y.tab.c  > $@
        $(RM) y.tab.c

.l.i:
        $(LEX) $<
        $(CPPFORPO) lex.yy.c  > $@
        $(RM) lex.yy.c

.c.po:
        $(CPPFORPO) $< > $<.i
        $(BUILD.po)

.cc.po:
        $(CPPFORPO) $< > $<.i
        $(BUILD.po)

.y.po:
        $(YACC) -d $<
        $(CPPFORPO) y.tab.c  > $<.i
        $(BUILD.po)
        $(RM) y.tab.c

.l.po:
        $(LEX) $<
        $(CPPFORPO) lex.yy.c  > $<.i
        $(BUILD.po)
        $(RM) lex.yy.c

#
# Rules to perform stylistic checks
#
.SUFFIXES: .x .xml .check .xmlchk

.h.check:
        $(DOT_H_CHECK)

.x.check:
        $(DOT_X_CHECK)

.xml.xmlchk:
        $(MANIFEST_CHECK)

#
```

```
# Include rules to render automated sccs get rules "safe".
#
include $(SRC)/Makefile.noget
```

```
**********************************************************
    8747 Wed Apr 24 01:32:50 2019
new/usr/src/cmd/cmd-inet/usr.sbin/Makefile
10804 Enable unused warnings outside of uts
Reviewed by: Andy Stormont <astormont@racktopsystems.com>
Reviewed by: Toomas Soome <tsoome@me.com>
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#

SYNCPROG=       syncinit syncloop syncstat

PROG=           6to4relay arp if_mpadm \
                in.comsat in.fingerd in.rarpd in.rexecd in.rlogind \
                in.rshd in.rwhod in.telnetd in.tftpd ipaddrsel \
                ndd ndp $(SYNCPROG)

MANIFEST=       rarp.xml telnet.xml comsat.xml finger.xml \
                login.xml shell.xml rexec.xml socket-filter-kssl.xml
SVCMETHOD=      svc-sockfilter

ROOTFS_PROG=    hostconfig route soconfig
SBINLINKS=      hostconfig route

RPCSVCPROG=     hostconfig
AUDITPROG=      in.rexecd in.rlogind in.rshd in.telnetd
PAMPROG=        in.rexecd in.rlogind in.rshd in.telnetd
SOCKETPROG=     6to4relay arp hostconfig if_mpadm in.comsat \
                in.fingerd in.rarpd in.rexecd in.rlogind in.rshd \
                in.rwhod in.telnetd in.tftpd ipaddrsel ndp route
NSLPROG=        6to4relay arp hostconfig in.comsat in.rarpd \
                in.rexecd in.rlogind in.rshd in.rwhod in.telnetd \
                in.tftpd ipaddrsel ndp route
CMDPROG=        in.telnetd
K5PROGS=        in.telnetd in.rlogind in.rshd
TSNETPROG=      route
DLADMPROG=      6to4relay
DEFAULTFILES=   telnetd.dfl

PROGSRCS=       $(PROG:%=%.c)
TFTPDOBJS=      in.tftpd.o tftpsubs.o
```

```
OTHERSRC=       ../usr.bin/tftp/tftpsubs.c
K5RLOGINOBJS=   in.rlogind.o
K5RSHDOBJS=     in.rshd.o
K5TELNETOBJS=   in.telnetd.o
SRCS=           $(PROGSRCS) $(OTHERSRC)

SUBDIRS=        ifconfig ilbadm in.rdisc in.routed \
                in.talkd inetadm inetconv ipadm ipmpstat ipqosconf ipsecutils \
                kssl/kssladm kssl/ksslcfg nwamadm nwamcfg ping routeadm \
                snoop sppptun traceroute wificonfig

MSGSUBDIRS=     ifconfig ilbadm in.routed in.talkd \
                inetadm inetconv ipadm ipmpstat ipqosconf ipsecutils \
                kssl/ksslcfg nwamadm nwamcfg routeadm sppptun snoop wificonfig

# As programs get lint-clean, add them here and to the 'lint' target.
# Eventually this hack should go away, and all in PROG should be
# lint-clean.
LINTCLEAN=      6to4relay arp in.rlogind in.rshd in.telnetd in.tftpd \
                ipaddrsel ndp route \
                in.rarpd if_mpadm $(SYNCPROG)
# Likewise, as subdirs get lint-clean, add them here.  Once
# they're all clean, replace the dependency of the lint target
# with SUBDIRS.  Also (sigh) deal with the commented-out build lines
# for the lint rule.
LINTSUBDIRS=    ilbadm in.rdisc in.routed in.talkd inetadm \
                inetconv ipmpstat ipqosconf ipsecutils kssl/kssladm \
                kssl/ksslcfg nwamadm nwamcfg ping routeadm sppptun traceroute \
                wificonfig
# And as programs are verified not to attempt to write into constants,
# -xstrconst should be used to ensure they stay that way.
CONSTCLEAN=

include ../../Makefile.cmd
ROOTMANIFESTDIR=        $(ROOTSVCNETWORK)
$(ROOTMANIFEST)         := FILEMODE= 444
include ../Makefile.cmd-inet

ROOTSBINPROG = $(ROOTFS_PROG:%=$(ROOTSBIN)/%)
ROOTUSRSBINLINKS = $(SBINLINKS:%=$(ROOTUSRSBIN)/%)

COMMONOBJS=     addr_match.o kcmd.o store_forw_creds.o
COMMONSRCS=     $(COMMONOBJS:%.o=$(CMDINETCOMMONDIR)/%.c)
SRCS+=          $(COMMONSRCS)

CERRWARN += -_gcc=-Wno-implicit-function-declaration
CERRWARN += -_gcc=-Wno-uninitialized
CERRWARN += -_gcc=-Wno-unused-variable
CERRWARN += -_gcc=-Wno-unused-function
CERRWARN += -_gcc=-Wno-parentheses
CERRWARN += -_gcc=-Wno-char-subscripts
CERRWARN += -_gcc=-Wno-extra
CERRWARN += -_gcc=-Wno-address

# "missing type for func"
SMATCH=off

#
# Message catalog
#
POFILES=        6to4relay.po if_mpadm.po in.comsat.po ipaddrsel.po route.po \
                soconfig.po
POFILE=         usr.sbin.po

all:=           TARGET= all
install:=       TARGET= install
```

```
clean:=         TARGET= clean
clobber:=       TARGET= clobber
lint:=          TARGET= lint
_msg:=          TARGET= _msg

CLOBBERFILES += $(ROOTFS_PROG) $(PROG)
CLEANFILES += $(COMMONOBJS) $(K5RLOGINOBJS) $(K5RSHDOBJS) $(TFTPDOBJS) \
                $(K5TELNETOBJS)

CPPFLAGS +=     -DSYSV -DBSD_COMP -I$(CMDINETCOMMONDIR) -I

include $(SRC)/lib/gss_mechs/mech_krb5/Makefile.mech_krb5
K5LIBS=

# Eventually just plain CFLAGS should be += -v, but not until all in
# PROGS are lint clean.
$(LINTCLEAN)            :=      CFLAGS += $(CCVERBOSE)
$(CONSTCLEAN)           :=      CFLAGS += $(XSTRCONST)

$(SYNCPROG)             :=      LDLIBS += -ldlpi
$(SOCKETPROG)           :=      LDLIBS += -lsocket
$(NSLPROG)              :=      LDLIBS += -lnsl
$(AUDITPROG)            :=      LDLIBS += -lbsm
$(PAMPROG)              :=      LDLIBS += -lpam
$(RPCSVCPROG)           :=      LDLIBS += -lrpcsvc
$(K5PROGS)              :=      LDFLAGS += $(KRUNPATH) \
                                -L$(ROOT)$(KLIBDIR_DO) -L$(ROOT)$(KLIBDIR_GL)
$(K5PROGS)              :=      K5LIBS=  -lmech_krb5
$(K5PROGS)              :=      CPPFLAGS += -I$(SRC)/head \
                                -I$(SRC)/uts/common/ \
                                -I$(SRC)/uts/common/gssapi/mechs/krb5/include \
                                -I$(SRC)/lib/gss_mechs/mech_krb5/include \
                                -I$(SRC)/lib/pam_modules/krb5
LDLIBS +=       $(K5LIBS)
$(TSNETPROG)            :=      LDLIBS += -ltsnet
$(DLADMPROG)            :=      LDLIBS += -ldladm

in.rarpd                :=      LDLIBS += -linetutil -ldlpi
if_mpadm                :=      LDLIBS += -linetutil -lipmp
if_mpadm.po             :=      XGETFLAGS += -a
route                   :=      CPPFLAGS += -DNDEBUG
ndd                     :=      LDLIBS += -ldladm -lipadm
$(RELEASE_BUILD)ndd     :=      CERRWARN += -_gcc=-Wno-unused
in.comsat               :=      LDFLAGS += $(MAPFILE.NGB:%=-M%)

.KEEP_STATE:

.PARALLEL:

all: $(PROG) $(ROOTFS_PROG) $(SUBDIRS) THIRDPARTYLICENSE.arp

#
# message catalog
#
_msg: $(MSGSUBDIRS) $(POFILE)

syncutil: $(SYNCPROG)

$(POFILE): $(POFILES)
        $(RM) $@
        cat $(POFILES) > $@

%.o: $(CMDINETCOMMONDIR)/%.c
        $(COMPILE.c) -o $@ $<

in.telnetd: $(K5TELNETOBJS)
```

```
        $(LINK.c) $(K5TELNETOBJS) -o $@ $(LDLIBS)
        $(POST_PROCESS)

in.rlogind: $(K5RLOGINOBJS) $(COMMONOBJS)
        $(LINK.c) $(K5RLOGINOBJS) $(COMMONOBJS) -o $@ $(LDLIBS)
        $(POST_PROCESS)

in.rshd: $(K5RSHDOBJS) $(COMMONOBJS)
        $(LINK.c) $(K5RSHDOBJS) $(COMMONOBJS) -o $@ $(LDLIBS)
        $(POST_PROCESS)

in.tftpd: $(TFTPDOBJS)
        $(LINK.c) $(TFTPDOBJS) -o $@ $(LDLIBS)
        $(POST_PROCESS)

tftpsubs.o: $(OTHERSRC)
        $(COMPILE.c) $(OTHERSRC) -o $@
        $(POST_PROCESS_O)

$(ROOTUSRSBINLINKS):
        -$(RM) $@; $(SYMLINK) ../../sbin/$(@F) $@

install: $(PROG) $(ROOTFS_PROG) $(SUBDIRS) .WAIT $(ROOTUSRSBINPROG) \
        $(ROOTSBINPROG) $(ROOTUSRSBINLINKS) $(ROOTETCDEFAULTFILES) \
        $(ROOTMANIFEST) $(ROOTSVCMETHOD) THIRDPARTYLICENSE.arp

THIRDPARTYLICENSE.arp: arp.c
        $(SED) -n '/University of California/,/SUCH DAMAGE/p' arp.c > $@

CLOBBERFILES += THIRDPARTYLICENSE.arp

#
# The reason this rule checks for the existence of the
# Makefile is that some of the directories do not exist
# in our exportable source builds.
#
$(SUBDIRS): FRC
        @if [ -f $@/Makefile  ]; then \
                cd $@; pwd; $(MAKE) $(TARGET); \
        else \
                true; \
        fi

FRC:

check:  $(CHKMANIFEST)

clean: $(SUBDIRS) clean_local
clean_local:
        $(RM) $(CLEANFILES)

clobber: $(SUBDIRS) clobber_local
clobber_local: clean_local
        $(RM) $(CLOBBERFILES)

lint: $(LINTSUBDIRS)
        $(LINT.c) 6to4relay.c $(LDLIBS) -lsocket -ldladm
        $(LINT.c) arp.c $(LDLIBS) -lsocket -lnsl
        @# $(LINT.c) in.rexecd.c $(LDLIBS) -lbsm -lpam
        $(LINT.c) -erroff=E_NAME_USED_NOT_DEF2 -erroff=E_NAME_DEF_NOT_USED2 \
                -I$(SRC)/head -I$(SRC)/uts/common/ \
                -I$(SRC)/uts/common/gssapi/mechs/krb5/include \
                -I$(SRC)/lib/gss_mechs/mech_krb5/include \
                -I$(SRC)/lib/pam_modules/krb5 \
                in.rlogind.c $(COMMONSRCS) $(LDLIBS) -lbsm -lpam -lsocket -lnsl
        $(LINT.c) -erroff=E_NAME_USED_NOT_DEF2 -erroff=E_NAME_DEF_NOT_USED2 \
                -I$(SRC)/head -I$(SRC)/uts/common/ \
                -I$(SRC)/uts/common/gssapi/mechs/krb5/include \
                -I$(SRC)/lib/gss_mechs/mech_krb5/include \
                -I$(SRC)/lib/pam_modules/krb5 \
                in.rshd.c $(COMMONSRCS) $(LDLIBS) -lbsm -lpam -lsocket -lnsl
        $(LINT.c) -erroff=E_NAME_USED_NOT_DEF2 \
                -erroff=E_GLOBAL_COULD_BE_STATIC2 \
                -I$(SRC)/head -I$(SRC)/uts/common/ \
                -I$(SRC)/uts/common/gssapi/mechs/krb5/include \
                -I$(SRC)/lib/gss_mechs/mech_krb5/include \
                -I$(SRC)/lib/pam_modules/krb5 \
                in.telnetd.c $(LDLIBS) -lbsm -lpam -lsocket -lnsl
        $(LINT.c) if_mpadm.c $(LDLIBS) -lsocket -lnsl -lipmp -linetutil
        $(LINT.c) ipaddrsel.c $(LDLIBS) -lsocket -lnsl
        $(LINT.c) route.c $(LDLIBS) -lsocket -lnsl -ltsnet
        $(LINT.c) syncinit.c $(LDLIBS) -ldlpi
        $(LINT.c) syncloop.c $(LDLIBS) -ldlpi
        $(LINT.c) syncstat.c $(LDLIBS) -ldlpi
        $(LINT.c) -erroff=E_NAME_USED_NOT_DEF2 in.rarpd.c $(LDLIBS) \
            -lsocket -lnsl
        $(LINT.c) ndp.c $(LDLIBS) \
            -lsocket -lnsl
        $(LINT.c) in.tftpd.c ../usr.bin/tftp/tftpsubs.c $(LDLIBS) \
            -lsocket -lnsl
```

```
**********************************************************
    6222 Wed Apr 24 01:32:50 2019
new/usr/src/cmd/fm/fmd/Makefile.fmd
10804 Enable unused warnings outside of uts
Reviewed by: Andy Stormont <astormont@racktopsystems.com>
Reviewed by: Toomas Soome <tsoome@me.com>
**********************************************************
```

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#

.KEEP_STATE:

SRCS += fmd.c \
	fmd_api.c \
	fmd_alloc.c \
	fmd_asru.c \
	fmd_buf.c \
	fmd_builtin.c \
	fmd_case.c \
	fmd_ckpt.c \
	fmd_conf.c \
	fmd_ctl.c \
	fmd_dispq.c \
	fmd_dr.c \
	fmd_error.c \
	fmd_event.c \
	fmd_eventq.c \
	fmd_fmri.c \
	fmd_idspace.c \
	fmd_list.c \
	fmd_log.c \
	fmd_main.c \
	fmd_module.c \
	fmd_nv.c \
	fmd_proc.c \
	fmd_protocol.c \
	fmd_rpc.c \
	fmd_rpc_adm.c \
	fmd_rpc_api.c \
	fmd_rtld.c \
	fmd_scheme.c \
	fmd_self.c \
```

```
	fmd_serd.c \
	fmd_string.c \
	fmd_subr.c \
	fmd_svc_adm.c \
	fmd_svc_api.c \
	fmd_sysevent.c \
	fmd_thread.c \
	fmd_time.c \
	fmd_timerq.c \
	fmd_topo.c \
	fmd_trace.c \
	fmd_ustat.c \
	fmd_xdr_adm.c \
	fmd_xdr_api.c \
	fmd_xprt.c

PROG = fmd
MANIFEST = ../common/$(PROG).xml

MAPFILE-DMOD = $(SRC)/cmd/mdb/common/modules/conf/mapfile-extern


LOGADMFILE =	$(PROG).logadm.conf
LOGADMDIR =	$(ROOT)/etc/logadm.d
LOGADMENT =	$(LOGADMDIR)/$(LOGADMFILE)
$(LOGADMENT) := FILEMODE = 444

ROOTPDIR = $(ROOT)/usr/lib/fm/$(PROG)
ROOTVDIR = $(ROOT)/var/fm/$(PROG)
ROOTVSUB = $(ROOTVDIR)/ckpt $(ROOTVDIR)/rsrc $(ROOTVDIR)/xprt
ROOTPROG = $(ROOTPDIR)/$(PROG)

ROOTMANIFESTDIR = $(ROOTSVCSYSTEM)
ROOTMANIFEST = $(ROOTMANIFESTDIR)/$(PROG).xml

OBJS = $(SRCS:%.c=%.o)
LINTFILES = $(SRCS:%.c=%.ln)

CLEANFILES += ../common/fmd_rpc_api.h ../common/fmd_rpc_adm.h
CLEANFILES += fmd_svc_adm.c fmd_svc_api.c fmd_xdr_adm.c fmd_xdr_api.c
CLEANFILES += ../common/fmd_error.c

DMOD = fmd.so
ROOTDMOD = $(ROOT)/usr/lib/mdb/proc/$(DMOD)
DMOD_SRCS = fmd_mdb.c
DMOD_OBJS = $(DMOD_SRCS:%.c=%.o)
DMOD_LINT = $(DMOD_SRCS:%.c=%.ln)

HDRS = fmd_api.h fmd_fmri.h
ROOTCDIR = $(ROOT)/etc/fm/$(PROG)
ROOTHDIR = $(ROOT)/usr/include/fm
ROOTHDRS = $(HDRS:%=$(ROOTHDIR)/%)

$(ROOTHDRS) := FILEMODE = 0644
$(ROOTVSUB) := DIRMODE = 0755
$(ROOTMANIFEST) := FILEMODE = 0444

$(NOT_RELEASE_BUILD)CPPFLAGS += -DDEBUG
CPPFLAGS += -I. -I../common
CPPFLAGS += -D_POSIX_PTHREAD_SEMANTICS -D_REENTRANT
CFLAGS += $(CTF_FLAGS) $(CCVERBOSE) $(XSTRCONST)
LINTFLAGS += -mu
CERRWARN += -_gcc=-Wno-switch
CERRWARN += -_gcc=-Wno-parentheses
CERRWARN += -_gcc=-Wno-uninitialized
CERRWARN += -_gcc=-Wno-clobbered
```

```
$(RELEASE_BUILD)CERRWARN += -_gcc=-Wno-unused-but-set-variable
CERRWARN += -_gcc=-Wno-unused-variable
CERRWARN += -_gcc=-Wno-clobbered

# not linted
SMATCH=off

$(PROG) := LDFLAGS += -R/usr/lib/fm
$(PROG) := LDLIBS += -L$(ROOTLIB)/fm -ltopo -ldiagcode -lsysevent -lsmbios \
                -luuid -lnvpair -lexacct -lnsl -lumem -ldevinfo -lfmd_msg

$(DMOD) := CFLAGS += $(CC_PICFLAGS) -G $(XREGSFLAG)
$(DMOD) := LDFLAGS += $(ZTEXT) $(ZDEFS) $(MAPFILE-DMOD:%=-M%)

#
# rpcgen(1) produces code that wants to be in the foreground if we're compiled
# DEBUG, which isn't appropriate for our daemon.  Forcibly undefine this code.
# It also produces various lint warnings; turn these off for these files only.
# Unfortunately we also have to turn off IGNOR2 for pass2 lint as well.
#
fmd_svc_adm.o fmd_svc_api.o := CPPFLAGS += -UDEBUG -URPC_SVC_FG
fmd_xdr_adm.o fmd_xdr_api.o := CPPFLAGS += -UDEBUG -URPC_SVC_FG

fmd_svc_adm.ln fmd_svc_api.ln fmd_xdr_adm.ln fmd_xdr_api.ln := LINTFLAGS += \
  -xerroff=E_FUNC_ARG_UNUSED -xerroff=E_FUNC_VAR_UNUSED -xerroff=E_STATIC_UNUSED

lint_prog := LINTFLAGS += -xerroff=E_FUNC_RET_ALWAYS_IGNOR2

.NO_PARALLEL:
.PARALLEL: $(OBJS) $(LINTFILES)

all: $(PROG) $(DMOD) install_h

$(LOGADMDIR):
	$(INS.dir)

$(LOGADMDIR)/%.conf: ../common/%.conf
	$(INS.file)

$(PROG): $(OBJS)
	$(LINK.c) $(OBJS) -o $@ $(LDLIBS)
	$(CTFMERGE) -L VERSION -o $@ $(OBJS)
	$(POST_PROCESS)

$(DMOD): $(DMOD_OBJS)
	$(LINK.c) $(DMOD_OBJS) -o $@ $(LDLIBS) -lc
	$(POST_PROCESS)

%.o: ../common/%.c
	$(COMPILE.c) $<
	$(CTFCONVERT_O)

%.o: %.c
	$(COMPILE.c) $<
	$(CTFCONVERT_O)

../common/fmd_error.c: ../common/mkerror.sh ../common/fmd_error.h
	sh ../common/mkerror.sh < ../common/fmd_error.h > $@

../common/fmd_rpc_%.c: ../common/fmd_rpc_%.h

../common/fmd_rpc.c: ../common/fmd_rpc_adm.h ../common/fmd_rpc_api.h

../common/fmd_rpc_%.h: ../common/fmd_rpc_%.x
	$(RPCGEN) -CMN -h -o $@ $<
```

```
fmd_svc_%.c: ../common/fmd_rpc_%.h
	$(RPCGEN) -CMN -m -o $@ `echo $< | sed 's/h$$/x/'`

fmd_xdr_%.c: ../common/fmd_rpc_%.h
	$(RPCGEN) -CMN -c -o $@ `echo $< | sed 's/h$$/x/'`

clean:
	$(RM) $(OBJS) $(DMOD_OBJS) $(LINTFILES) $(DMOD_LINT)
	$(RM) $(CLEANFILES)

clobber: clean
	$(RM) $(PROG) $(DMOD)

%.ln: ../common/%.c
	$(LINT.c) -c $<

%.ln: %.c
	$(LINT.c) -c $<

lint_prog: $(LINTFILES)
	$(LINT) $(LINTFLAGS) $(LINTFILES) $(LDLIBS)

lint_dmod: $(DMOD_LINT)
	$(LINT) $(LINTFLAGS) $(DMOD_LINT) $(LDLIBS)

lint: lint_prog lint_dmod

$(ROOT)/etc/fm:
	$(INS.dir)

$(ROOTCDIR): $(ROOT)/etc/fm
	$(INS.dir)

$(ROOTHDIR):
	$(INS.dir)

$(ROOTHDIR)/%.h: ../common/%.h
	$(INS.file)

$(ROOTMANIFESTDIR)/%.xml: ../common/%.xml
	$(INS.file)

$(ROOT)/var/%:
	$(INS.dir)

$(ROOTVDIR): $(ROOT)/var/fm
	$(INS.dir)

$(ROOTVSUB): $(ROOTVDIR)
	$(INS.dir)

$(ROOT)/usr/lib/fm:
	$(INS.dir)

$(ROOTPDIR): $(ROOT)/usr/lib/fm
	$(INS.dir)

$(ROOTPROG): $(ROOTPDIR) $(PROG)
	$(RM) $@; $(INS) -s -m 0555 -f $(@D) $(PROG)

$(ROOT)/usr/lib/mdb/proc: $(ROOT)/usr/lib/mdb
	$(INS.dir)

$(ROOTDMOD): $(ROOT)/usr/lib/mdb/proc $(DMOD)
	$(RM) $@; $(INS) -s -m 0555 -f $(@D) $(DMOD)
```

```
install_h: $(ROOTHDIR) $(ROOTHDRS)

install: all install_h $(ROOTPROG) $(ROOTDMOD) $(LOGADMDIR) $(LOGADMENT) \
        $(ROOTCDIR) $(ROOTVDIR) $(ROOTVSUB) $(ROOTMANIFEST)

check: $(CHKMANIFEST)
```

```
**********************************************************
    1900 Wed Apr 24 01:32:50 2019
new/usr/src/cmd/mdb/intel/Makefile.kmdb
10804 Enable unused warnings outside of uts
Reviewed by: Andy Stormont <astormont@racktopsystems.com>
Reviewed by: Toomas Soome <tsoome@me.com>
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PROMSRCS += \
        prom_env.c \
        prom_getchar.c \
        prom_init.c \
        prom_printf.c \
        prom_putchar.c

KMDBSRCS += \
        kaif.c \
        kmdb_dpi_isadep.c \
        kmdb_fault_isadep.c \
        kmdb_kdi_isadep.c \
        kmdb_promif_isadep.c \
        kvm_isadep.c

KMDBML += \
        kmdb_asmutil.s \
        kmdb_setcontext.s

KCTLSRCS += \
        kctl_isadep.c

CTXOFFUSERS = \
        kmdb_setcontext.o

CPPFLAGS += -DDIS_TEXT

$(CTXOFFUSERS) $(CTXOFFUSERS:%.o=%.ln): kmdb_context_off.h

kaif_activate.o kaif_activate.ln := CPPFLAGS += -D_MACHDEP -D_KMEMUSER
```

```
$(RELEASE_BUILD)kaif.o := CERRWARN += -_gcc=-Wno-unused

STANDLIBS += \
        ../libstandctf/libstandctf.so \
        $(SRC)/lib/libumem/$(MACHDIR)/libstandumem.so \
        ../libstand/libstand.a

KMDBLIBS = $(STANDLIBS) ../mdb_ks/kmod/mdb_ks

MAPFILE_SOURCES = \
        $(MAPFILE_SOURCES_COMMON) \
        ../../kmdb/kmdb_dpi_isadep.h \
        $(MAPFILE_SOURCES_$(MACH))

%.o: ../../../../../uts/intel/promif/%.c
        $(COMPILE.c) $<
        $(CTFCONVERT_O)

%.ln: ../../../../../uts/intel/promif/%.c
        $(LINT.c) -c $<
```

```
**********************************************************
    4822 Wed Apr 24 01:32:51 2019
new/usr/src/cmd/sgs/libld/Makefile.com
10804 Enable unused warnings outside of uts
Reviewed by: Andy Stormont <astormont@racktopsystems.com>
Reviewed by: Toomas Soome <tsoome@me.com>
**********************************************************
```

```
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LIBRARY =       libld.a
VERS =          .4

COMOBJS =       debug.o         globals.o       util.o

COMOBJS32 =     args32.o        entry32.o       exit32.o        groups32.o \
                ldentry32.o     ldlibs32.o      ldmachdep32.o   ldmain32.o \
                libs32.o        files32.o       map32.o         map_core32.o \
                map_support32.o map_v232.o      order32.o       outfile32.o \
                place32.o       relocate32.o    resolve32.o     sections32.o \
                sunwmove32.o    support32.o     syms32.o        update32.o \
                unwind32.o      version32.o     wrap32.o

COMOBJS64 =     args64.o        entry64.o       exit64.o        groups64.o \
                ldentry64.o     ldlibs64.o      ldmachdep64.o   ldmain64.o \
                libs64.o        files64.o       map64.o         map_core64.o \
                map_support64.o map_v264.o      order64.o       outfile64.o \
                place64.o       relocate64.o    resolve64.o     sections64.o \
                sunwmove64.o    support64.o     syms64.o        update64.o \
                unwind64.o      version64.o     wrap64.o

TOOLOBJS =      alist.o         assfail.o       findprime.o     string_table.o \
                strhash.o
AVLOBJ =        avl.o

# Relocation engine objects.
G_MACHOBJS32 =  doreloc_sparc_32.o doreloc_x86_32.o
G_MACHOBJS64 =  doreloc_sparc_64.o doreloc_x86_64.o

# Target specific objects (sparc/sparcv9)
L_SPARC_MACHOBJS32 =    machrel.sparc32.o       machsym.sparc32.o
```

```
L_SPARC_MACHOBJS64 =    machrel.sparc64.o       machsym.sparc64.o

# Target specific objects (i386/amd64)
E_X86_TOOLOBJS =        leb128.o
L_X86_MACHOBJS32 =      machrel.intel32.o
L_X86_MACHOBJS64 =      machrel.amd64.o

# All target specific objects rolled together
E_TOOLOBJS =    $(E_SPARC_TOOLOBJS) \
        $(E_X86_TOOLOBJS)
L_MACHOBJS32 =  $(L_SPARC_MACHOBJS32) \
        $(L_X86_MACHOBJS32)
L_MACHOBJS64 =  $(L_SPARC_MACHOBJS64) \
        $(L_X86_MACHOBJS64)


BLTOBJ =        msg.o
ELFCAPOBJ =     elfcap.o

OBJECTS =       $(BLTOBJ) $(G_MACHOBJS32) $(G_MACHOBJS64) \
                $(L_MACHOBJS32) $(L_MACHOBJS64) \
                $(COMOBJS) $(COMOBJS32) $(COMOBJS64) \
                $(TOOLOBJS) $(E_TOOLOBJS) $(AVLOBJ) $(ELFCAPOBJ)

include         $(SRC)/lib/Makefile.lib
include         $(SRC)/cmd/sgs/Makefile.com

SRCDIR =        ../common

CERRWARN += -_gcc=-Wno-unused-value
CERRWARN += -_gcc=-Wno-parentheses
CERRWARN += -_gcc=-Wno-uninitialized
CERRWARN += -_gcc=-Wno-switch
CERRWARN += -_gcc=-Wno-char-subscripts
CERRWARN += -_gcc=-Wno-type-limits
$(RELEASE_BUILD)CERRWARN += -_gcc=-Wno-unused

SMOFF += no_if_block

# Location of the shared relocation engines maintained under usr/src/uts.
#
KRTLD_I386 = $(SRCBASE)/uts/$(VAR_PLAT_i386)/krtld
KRTLD_AMD64 = $(SRCBASE)/uts/$(VAR_PLAT_amd64)/krtld
KRTLD_SPARC = $(SRCBASE)/uts/$(VAR_PLAT_sparc)/krtld


CPPFLAGS +=     -DUSE_LIBLD_MALLOC -I$(SRCBASE)/lib/libc/inc \
                    -I$(SRCBASE)/uts/common/krtld -I$(SRCBASE)/uts/sparc \
                    $(VAR_LIBLD_CPPFLAGS)
LDLIBS +=       $(CONVLIBDIR) $(CONV_LIB) $(LDDBGLIBDIR) $(LDDBG_LIB) \
                    $(ELFLIBDIR) -lelf $(DLLIB) -lc

DYNFLAGS +=     $(VERSREF) $(CC_USE_PROTO) '-R$$ORIGIN'

native:=        DYNFLAGS        += $(CONVLIBDIR)

BLTDEFS =       msg.h
BLTDATA =       msg.c
BLTMESG =       $(SGSMSGDIR)/libld

BLTFILES =      $(BLTDEFS) $(BLTDATA) $(BLTMESG)

# Due to cross linking support, every copy of libld contains every message.
# However, we keep target specific messages in their own separate files for
# organizational reasons.
#
```

```
SGSMSGCOM =     ../common/libld.msg
SGSMSGSPARC =   ../common/libld.sparc.msg
SGSMSGINTEL =   ../common/libld.intel.msg
SGSMSGTARG =    $(SGSMSGCOM) $(SGSMSGSPARC) $(SGSMSGINTEL)
SGSMSGALL =     $(SGSMSGCOM) $(SGSMSGSPARC) $(SGSMSGINTEL)

SGSMSGFLAGS1 =  $(SGSMSGFLAGS) -m $(BLTMESG)
SGSMSGFLAGS2 =  $(SGSMSGFLAGS) -h $(BLTDEFS) -d $(BLTDATA) -n libld_msg

CHKSRCS =       $(SRCBASE)/uts/common/krtld/reloc.h \
                $(COMOBJS32:%32.o=../common/%.c) \
                $(L_MACHOBJS32:%32.o=../common/%.c) \
                $(L_MACHOBJS64:%64.o=../common/%.c) \
                $(KRTLD_I386)/doreloc.c \
                $(KRTLD_AMD64)/doreloc.c \
                $(KRTLD_SPARC)/doreloc.c

LIBSRCS =       $(TOOLOBJS:%.o=$(SGSTOOLS)/common/%.c) \
                $(E_TOOLOBJS:%.o=$(SGSTOOLS)/common/%.c) \
                $(COMOBJS:%.o=../common/%.c) \
                $(AVLOBJS:%.o=$(VAR_AVLDIR)/%.c) \
                $(BLTDATA)

CLEANFILES +=   $(BLTFILES)
CLOBBERFILES += $(DYNLIB) $(LIBLINKS)

ROOTFS_DYNLIB = $(DYNLIB:%=$(ROOTFS_LIBDIR)/%)
```

```
**********************************************************
   22116 Wed Apr 24 01:32:51 2019
new/usr/src/lib/libc/amd64/Makefile
10804 Enable unused warnings outside of uts
Reviewed by: Andy Stormont <astormont@racktopsystems.com>
Reviewed by: Toomas Soome <tsoome@me.com>
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#

LIBCBASE=       .
LIBCDIR=        $(SRC)/lib/libc
LIBRARY=        libc.a
LIB_PIC=        libc_pic.a
VERS=           .1
CPP=            /usr/lib/cpp
TARGET_ARCH=    amd64

# include comm page definitions
include $(SRC)/lib/commpage/Makefile.shared.com
include $(SRC)/lib/commpage/Makefile.shared.targ

# objects are grouped by source directory

# local objects
STRETS=

CRTOBJS=                        \
        cerror.o

DYNOBJS=

FPOBJS=                         \
        fpgetmask.o             \
        fpgetround.o            \
        fpsetmask.o             \
        fpsetround.o            \
        fpstart.o               \
```

```
        ieee.o

I386FPOBJS=                     \
        _D_cplx_div.o           \
        _D_cplx_div_ix.o        \
        _D_cplx_div_rx.o        \
        _D_cplx_lr_div.o        \
        _D_cplx_lr_div_ix.o     \
        _D_cplx_lr_div_rx.o     \
        _D_cplx_mul.o           \
        _F_cplx_div.o           \
        _F_cplx_div_ix.o        \
        _F_cplx_div_rx.o        \
        _F_cplx_lr_div.o        \
        _F_cplx_lr_div_ix.o     \
        _F_cplx_lr_div_rx.o     \
        _F_cplx_mul.o           \
        _X_cplx_div.o           \
        _X_cplx_div_ix.o        \
        _X_cplx_div_rx.o        \
        _X_cplx_lr_div.o        \
        _X_cplx_lr_div_ix.o     \
        _X_cplx_lr_div_rx.o     \
        _X_cplx_mul.o

FPASMOBJS=                      \
        __xgetRD.o              \
        _xtoll.o                \
        _xtoull.o               \
        _base_il.o              \
        fpcw.o                  \
        fpgetsticky.o           \
        fpsetsticky.o

ATOMICOBJS=                     \
        atomic.o

CHACHAOBJS=                     \
        chacha.o

XATTROBJS=                      \
        xattr_common.o
COMOBJS=                        \
        bcmp.o                  \
        bcopy.o                 \
        bsearch.o               \
        bzero.o                 \
        qsort.o                 \
        strtol.o                \
        strtoul.o               \
        strtoll.o               \
        strtoull.o

GENOBJS=                        \
        $(COMMPAGE_OBJS)        \
        _getsp.o                \
        abs.o                   \
        alloca.o                \
        arc4random.o            \
        arc4random_uniform.o    \
        attrat.o                \
        byteorder.o             \
        cuexit.o                \
        ecvt.o                  \
        endian.o                \
        errlst.o                \
        amd64_data.o            \
        ldivide.o               \
        lock.o                  \
        makectxt.o              \
        memccpy.o               \
        memchr.o                \
        memcmp.o                \
        memcpy.o                \
        memset.o                \
        new_list.o              \
        proc64_id.o             \
        proc64_support.o        \
        setjmp.o                \
        siginfolst.o            \
        siglongjmp.o            \
        strcmp.o                \
        strcpy.o                \
        strlen.o                \
        strncmp.o               \
        strncpy.o               \
        strnlen.o               \
        sync_instruction_memory.o

# Preserved solely to ease maintenance of 32-bit and 64-bit library builds
# This macro should ALWAYS be empty; native APIs are already 'large file'.
COMSYSOBJS64=

SYSOBJS64=

COMSYSOBJS=                     \
        __clock_timer.o         \
        __getloadavg.o          \
        __rusagesys.o           \
        __signotify.o           \
        __sigrt.o               \
        __time.o                \
        _lgrp_home_fast.o       \
        _lgrpsys.o              \
        _nfssys.o               \
        _portfs.o               \
        _pset.o                 \
        _rpcsys.o               \
        _sigaction.o            \
        _so_accept.o            \
        _so_bind.o              \
        _so_connect.o           \
        _so_getpeername.o       \
        _so_getsockname.o       \
        _so_getsockopt.o        \
        _so_listen.o            \
        _so_recv.o              \
        _so_recvfrom.o          \
        _so_recvmsg.o           \
        _so_send.o              \
        _so_sendmsg.o           \
        _so_sendto.o            \
        _so_setsockopt.o        \
        _so_shutdown.o          \
        _so_socket.o            \
        _so_socketpair.o        \
        _sockconfig.o           \
        acct.o                  \
        acl.o                   \
        adjtime.o               \
        alarm.o                 \
        brk.o                   \
```

```
        chdir.o                 \
        chroot.o                \
        cladm.o                 \
        close.o                 \
        execve.o                \
        exit.o                  \
        facl.o                  \
        fchdir.o                \
        fchroot.o               \
        fdsync.o                \
        fpathconf.o             \
        fstatfs.o               \
        fstatvfs.o              \
        getcpuid.o              \
        getdents.o              \
        getegid.o               \
        geteuid.o               \
        getgid.o                \
        getgroups.o             \
        gethrtime.o             \
        getitimer.o             \
        getmsg.o                \
        getpid.o                \
        getpmsg.o               \
        getppid.o               \
        getrandom.o             \
        getrlimit.o             \
        getuid.o                \
        gtty.o                  \
        install_utrap.o         \
        ioctl.o                 \
        kaio.o                  \
        kill.o                  \
        llseek.o                \
        lseek.o                 \
        mmapobjsys.o            \
        memcntl.o               \
        mincore.o               \
        mmap.o                  \
        modctl.o                \
        mount.o                 \
        mprotect.o              \
        munmap.o                \
        nice.o                  \
        ntp_adjtime.o           \
        ntp_gettime.o           \
        p_online.o              \
        pathconf.o              \
        pause.o                 \
        pcsample.o              \
        pipe2.o                 \
        pollsys.o               \
        pread.o                 \
        preadv.o                \
        priocntlset.o           \
        processor_bind.o        \
        processor_info.o        \
        profil.o                \
        psecflagsset.o          \
        putmsg.o                \
        putpmsg.o               \
        pwrite.o                \
        pwritev.o               \
        read.o                  \
        readv.o                 \
        resolvepath.o           \
        seteguid.o              \
        setgid.o                \
        setgroups.o             \
        setitimer.o             \
        setreid.o               \
        setrlimit.o             \
        setuid.o                \
        sigaltstk.o             \
        sigprocmsk.o            \
        sigsendset.o            \
        sigsuspend.o            \
        statfs.o                \
        statvfs.o               \
        stty.o                  \
        sync.o                  \
        sysconfig.o             \
        sysfs.o                 \
        sysinfo.o               \
        syslwp.o                \
        times.o                 \
        ulimit.o                \
        umask.o                 \
        umount2.o               \
        utssys.o                \
        uucopy.o                \
        vhangup.o               \
        waitid.o                \
        write.o                 \
        writev.o                \
        yield.o

SYSOBJS=                        \
        __clock_gettime.o       \
        __clock_gettime_sys.o   \
        __getcontext.o          \
        __uadmin.o              \
        _lwp_mutex_unlock.o     \
        _stack_grow.o           \
        door.o                  \
        forkx.o                 \
        forkallx.o              \
        getcontext.o            \
        gettimeofday.o          \
        lwp_private.o           \
        nuname.o                \
        syscall.o               \
        sysi86.o                \
        tls_get_addr.o          \
        uadmin.o                \
        umount.o                \
        uname.o                 \
        vforkx.o

# Preserved solely to ease maintenance of 32-bit and 64-bit library builds
# This macro should ALWAYS be empty; native APIs are already ’large file’.
PORTGEN64=

# objects from source under $(LIBCDIR)/port
PORTFP=                         \
        __flt_decim.o           \
        __flt_rounds.o          \
        __tbl_10_b.o            \
        __tbl_10_h.o            \
        __tbl_10_s.o            \
        __tbl_2_b.o             \
        __tbl_2_h.o             \
```

```
        __tbl_2_s.o             \
        __tbl_fdq.o             \
        __tbl_tens.o            \
        __x_power.o             \
        _base_sup.o             \
        aconvert.o              \
        decimal_bin.o           \
        double_decim.o          \
        econvert.o              \
        fconvert.o              \
        file_decim.o            \
        finite.o                \
        fp_data.o               \
        func_decim.o            \
        gconvert.o              \
        hex_bin.o               \
        ieee_globals.o          \
        pack_float.o            \
        sigfpe.o                \
        string_decim.o

PORTGEN=                        \
        _env_data.o             \
        _xftw.o                 \
        a64l.o                  \
        abort.o                 \
        addsev.o                \
        ascii_strcasecmp.o      \
        ascii_strncasecmp.o     \
        assert.o                \
        atexit.o                \
        atfork.o                \
        atof.o                  \
        atoi.o                  \
        atol.o                  \
        atoll.o                 \
        attropen.o              \
        basename.o              \
        calloc.o                \
        catgets.o               \
        catopen.o               \
        cfgetispeed.o           \
        cfgetospeed.o           \
        cfree.o                 \
        cfsetispeed.o           \
        cfsetospeed.o           \
        cftime.o                \
        clock.o                 \
        closedir.o              \
        closefrom.o             \
        confstr.o               \
        crypt.o                 \
        csetlen.o               \
        ctime.o                 \
        ctime_r.o               \
        daemon.o                \
        deflt.o                 \
        directio.o              \
        dirname.o               \
        div.o                   \
        drand48.o               \
        dup.o                   \
        env_data.o              \
        err.o                   \
        errno.o                 \
        euclen.o                \
        event_port.o            \
        execvp.o                \
        explicit_bzero.o        \
        fattach.o               \
        fdetach.o               \
        fdopendir.o             \
        ffs.o                   \
        flock.o                 \
        fls.o                   \
        fmtmsg.o                \
        freezero.o              \
        ftime.o                 \
        ftok.o                  \
        fts.o                   \
        ftw.o                   \
        gcvt.o                  \
        get_nprocs.o            \
        getauxv.o               \
        getcwd.o                \
        getdate_err.o           \
        getdtblsize.o           \
        getentropy.o            \
        getenv.o                \
        getexecname.o           \
        getgrnam.o              \
        getgrnam_r.o            \
        gethostid.o             \
        gethostname.o           \
        gethz.o                 \
        getisax.o               \
        getloadavg.o            \
        getlogin.o              \
        getmntent.o             \
        getnetgrent.o           \
        getopt.o                \
        getopt_long.o           \
        getpagesize.o           \
        getpw.o                 \
        getpwnam.o              \
        getpwnam_r.o            \
        getrusage.o             \
        getspent.o              \
        getspent_r.o            \
        getsubopt.o             \
        gettxt.o                \
        getusershell.o          \
        getut.o                 \
        getutx.o                \
        getvfsent.o             \
        getwd.o                 \
        getwidth.o              \
        getxby_door.o           \
        gtxt.o                  \
        hsearch.o               \
        iconv.o                 \
        imaxabs.o               \
        imaxdiv.o               \
        index.o                 \
        initgroups.o            \
        insque.o                \
        isaexec.o               \
        isastream.o             \
        isatty.o                \
        killpg.o                \
        klpdlib.o               \
        l64a.o                  \
```

```
        lckpwdf.o               \
        lconstants.o            \
        lexp10.o                \
        lfind.o                 \
        lfmt.o                  \
        lfmt_log.o              \
        lldiv.o                 \
        llog10.o                \
        lltostr.o               \
        lmath.o                 \
        localtime.o             \
        lsearch.o               \
        madvise.o               \
        malloc.o                \
        memalign.o              \
        memmem.o                \
        memset_s.o              \
        mkdev.o                 \
        mkdtemp.o               \
        mkfifo.o                \
        mkstemp.o               \
        mktemp.o                \
        mlock.o                 \
        mlockall.o              \
        mon.o                   \
        msync.o                 \
        munlock.o               \
        munlockall.o            \
        ndbm.o                  \
        nftw.o                  \
        nlspath_checks.o        \
        nsparse.o               \
        nss_common.o            \
        nss_dbdefs.o            \
        nss_deffinder.o         \
        opendir.o               \
        opt_data.o              \
        perror.o                \
        pfmt.o                  \
        pfmt_data.o             \
        pfmt_print.o            \
        pipe.o                  \
        plock.o                 \
        poll.o                  \
        posix_fadvise.o         \
        posix_fallocate.o       \
        posix_madvise.o         \
        posix_memalign.o        \
        priocntl.o              \
        priv_str_xlate.o        \
        privlib.o               \
        psecflags.o             \
        psiginfo.o              \
        psignal.o               \
        pt.o                    \
        putpwent.o              \
        putspent.o              \
        raise.o                 \
        rand.o                  \
        random.o                \
        rctlops.o               \
        readdir.o               \
        readdir_r.o             \
        reallocarray.o          \
        recallocarray.o         \
        realpath.o              \
        reboot.o                \
        regexpr.o               \
        remove.o                \
        rewinddir.o             \
        rindex.o                \
        scandir.o               \
        seekdir.o               \
        select.o                \
        set_constraint_handler_s.o \
        setlabel.o              \
        setpriority.o           \
        settimeofday.o          \
        sh_locks.o              \
        sigflag.o               \
        siglist.o               \
        sigsend.o               \
        sigsetops.o             \
        ssignal.o               \
        stack.o                 \
        stpcpy.o                \
        stpncpy.o               \
        str2sig.o               \
        strcase_charmap.o       \
        strcat.o                \
        strchr.o                \
        strchrnul.o             \
        strcspn.o               \
        strdup.o                \
        strerror.o              \
        strlcat.o               \
        strlcpy.o               \
        strncat.o               \
        strndup.o               \
        strpbrk.o               \
        strrchr.o               \
        strsep.o                \
        strsignal.o             \
        strspn.o                \
        strstr.o                \
        strtod.o                \
        strtoimax.o             \
        strtok.o                \
        strtok_r.o              \
        strtonum.o              \
        strtoumax.o             \
        swab.o                  \
        swapctl.o               \
        sysconf.o               \
        syslog.o                \
        tcdrain.o               \
        tcflow.o                \
        tcflush.o               \
        tcgetattr.o             \
        tcgetpgrp.o             \
        tcgetsid.o              \
        tcsendbreak.o           \
        tcsetattr.o             \
        tcsetpgrp.o             \
        tell.o                  \
        telldir.o               \
        tfind.o                 \
        time_data.o             \
        time_gdata.o            \
        timespec_get.o          \
        tls_data.o              \
        truncate.o              \
```

```
        tsdalloc.o              \
        tsearch.o               \
        ttyname.o               \
        ttyslot.o               \
        ualarm.o                \
        ucred.o                 \
        valloc.o                \
        vlfmt.o                 \
        vpfmt.o                 \
        waitpid.o               \
        walkstack.o             \
        wdata.o                 \
        xgetwidth.o             \
        xpg4.o                  \
        xpg6.o

PORTINET=                       \
        inet_lnaof.o            \
        inet_makeaddr.o         \
        inet_network.o          \
        inet_ntoa.o             \
        inet_ntop.o             \
        inet_pton.o

PORTPRINT_W=                    \
        doprnt_w.o

PORTPRINT=                      \
        asprintf.o              \
        doprnt.o                \
        fprintf.o               \
        printf.o                \
        snprintf.o              \
        sprintf.o               \
        vfprintf.o              \
        vprintf.o               \
        vsnprintf.o             \
        vsprintf.o              \
        vwprintf.o              \
        wprintf.o

# Preserved solely to ease maintenance of 32-bit and 64-bit library builds
# This macro should ALWAYS be empty; native APIs are already 'large file'.
PORTSTDIO64=

PORTSTDIO_W=                    \
        doscan_w.o

PORTSTDIO=                      \
        __extensions.o          \
        _endopen.o              \
        _filbuf.o               \
        _findbuf.o              \
        _flsbuf.o               \
        _wrtchk.o               \
        clearerr.o              \
        ctermid.o               \
        ctermid_r.o             \
        cuserid.o               \
        data.o                  \
        doscan.o                \
        fdopen.o                \
        feof.o                  \
        ferror.o                \
        fgetc.o                 \
        fgets.o                 \
        fileno.o                \
        flockf.o                \
        flush.o                 \
        fopen.o                 \
        fpos.o                  \
        fputc.o                 \
        fputs.o                 \
        fread.o                 \
        fseek.o                 \
        fseeko.o                \
        ftell.o                 \
        ftello.o                \
        fwrite.o                \
        getc.o                  \
        getchar.o               \
        getline.o               \
        getpass.o               \
        gets.o                  \
        getw.o                  \
        mse.o                   \
        popen.o                 \
        putc.o                  \
        putchar.o               \
        puts.o                  \
        putw.o                  \
        rewind.o                \
        scanf.o                 \
        setbuf.o                \
        setbuffer.o             \
        setvbuf.o               \
        system.o                \
        tempnam.o               \
        tmpfile.o               \
        tmpnam_r.o              \
        ungetc.o                \
        vscanf.o                \
        vwscanf.o               \
        wscanf.o

PORTI18N=                       \
        getwchar.o              \
        putwchar.o              \
        putws.o                 \
        strtows.o               \
        wcsnlen.o               \
        wcsstr.o                \
        wcstoimax.o             \
        wcstol.o                \
        wcstoul.o               \
        wcswcs.o                \
        wmemchr.o               \
        wmemcmp.o               \
        wmemcpy.o               \
        wmemmove.o              \
        wmemset.o               \
        wscat.o                 \
        wschr.o                 \
        wscmp.o                 \
        wscpy.o                 \
        wscspn.o                \
        wsdup.o                 \
        wslen.o                 \
        wsncat.o                \
        wsncmp.o                \
        wsncpy.o                \
        wspbrk.o                \
```

```
        wsprintf.o              \
        wsrchr.o                \
        wsscanf.o               \
        wsspn.o                 \
        wstod.o                 \
        wstok.o                 \
        wstol.o                 \
        wstoll.o                \
        wsxfrm.o                \
        gettext.o               \
        gettext_gnu.o           \
        gettext_real.o          \
        gettext_util.o          \
        plural_parser.o         \
        wdresolve.o             \
        _ctype.o                \
        isascii.o               \
        toascii.o

PORTI18N_COND=                  \
        wcstol_longlong.o       \
        wcstoul_longlong.o

PORTLOCALE=                     \
        big5.o                  \
        btowc.o                 \
        collate.o               \
        collcmp.o               \
        euc.o                   \
        fnmatch.o               \
        fgetwc.o                \
        fgetws.o                \
        fix_grouping.o          \
        fputwc.o                \
        fputws.o                \
        fwide.o                 \
        gb18030.o               \
        gb2312.o                \
        gbk.o                   \
        getdate.o               \
        isdigit.o               \
        iswctype.o              \
        ldpart.o                \
        lmessages.o             \
        lnumeric.o              \
        lmonetary.o             \
        localeconv.o            \
        localeimpl.o            \
        mbftowc.o               \
        mblen.o                 \
        mbrlen.o                \
        mbrtowc.o               \
        mbsinit.o               \
        mbsnrtowcs.o            \
        mbsrtowcs.o             \
        mbstowcs.o              \
        mbtowc.o                \
        mskanji.o               \
        nextwctype.o            \
        nl_langinfo.o           \
        none.o                  \
        rune.o                  \
        runetype.o              \
        setlocale.o             \
        setrunelocale.o         \
        strcasecmp.o            \
        strcasestr.o            \
        strcoll.o               \
        strfmon.o               \
        strftime.o              \
        strncasecmp.o           \
        strptime.o              \
        strxfrm.o               \
        table.o                 \
        timelocal.o             \
        tolower.o               \
        towlower.o              \
        ungetwc.o               \
        utf8.o                  \
        wcrtomb.o               \
        wcscasecmp.o            \
        wcscoll.o               \
        wcsftime.o              \
        wcsnrtombs.o            \
        wcsrtombs.o             \
        wcswidth.o              \
        wcstombs.o              \
        wcsxfrm.o               \
        wctob.o                 \
        wctomb.o                \
        wctrans.o               \
        wctype.o                \
        wcwidth.o               \
        wscol.o

AIOOBJS=                        \
        aio.o                   \
        aio_alloc.o             \
        posix_aio.o

RTOBJS=                         \
        clock_timer.o           \
        mqueue.o                \
        pos4obj.o               \
        sched.o                 \
        sem.o                   \
        shm.o                   \
        sigev_thread.o

SECFLAGSOBJS=                   \
        secflags.o

TPOOLOBJS=                      \
        thread_pool.o

THREADSOBJS=                    \
        alloc.o                 \
        assfail.o               \
        c11_thr.o               \
        cancel.o                \
        door_calls.o            \
        tmem.o                  \
        pthr_attr.o             \
        pthr_barrier.o          \
        pthr_cond.o             \
        pthr_mutex.o            \
        pthr_rwlock.o           \
        pthread.o               \
        rwlock.o                \
        scalls.o                \
        sema.o                  \
        sigaction.o             \
```

```
        spawn.o                 \
        synch.o                 \
        tdb_agent.o             \
        thr.o                   \
        thread_interface.o      \
        tls.o                   \
        tsd.o

THREADSMACHOBJS=                \
        machdep.o

THREADSASMOBJS=                 \
        asm_subr.o

UNICODEOBJS=                    \
        u8_textprep.o           \
        uconv.o

UNWINDMACHOBJS=                 \
        call_frame_inst.o       \
        eh_frame.o              \
        thrp_unwind.o           \
        unwind.o

pics/unwind.o:= COPTFLAG64 =

UNWINDASMOBJS=                  \
        unwind_frame.o

# Preserved solely to ease maintenance of 32-bit and 64-bit library builds
# This macro should ALWAYS be empty; native APIs are already 'large file'.
PORTSYS64=

PORTSYS=                        \
        _autofssys.o            \
        access.o                \
        acctctl.o               \
        bsd_signal.o            \
        chmod.o                 \
        chown.o                 \
        corectl.o               \
        epoll.o                 \
        exacctsys.o             \
        execl.o                 \
        execle.o                \
        execv.o                 \
        eventfd.o               \
        fcntl.o                 \
        getpagesizes.o          \
        getpeerucred.o          \
        inst_sync.o             \
        issetugid.o             \
        label.o                 \
        link.o                  \
        lockf.o                 \
        lwp.o                   \
        lwp_cond.o              \
        lwp_rwlock.o            \
        lwp_sigmask.o           \
        meminfosys.o            \
        mkdir.o                 \
        mknod.o                 \
        msgsys.o                \
        nfssys.o                \
        open.o                  \
        pgrpsys.o               \
        posix_sigwait.o         \
        ppriv.o                 \
        psetsys.o               \
        rctlsys.o               \
        readlink.o              \
        rename.o                \
        sbrk.o                  \
        semsys.o                \
        set_errno.o             \
        sharefs.o               \
        shmsys.o                \
        sidsys.o                \
        siginterrupt.o          \
        signal.o                \
        signalfd.o              \
        sigpending.o            \
        sigstack.o              \
        stat.o                  \
        symlink.o               \
        tasksys.o               \
        time.o                  \
        time_util.o             \
        timerfd.o               \
        ucontext.o              \
        unlink.o                \
        ustat.o                 \
        utimesys.o              \
        zone.o

PORTREGEX=                      \
        glob.o                  \
        regcmp.o                \
        regcomp.o               \
        regerror.o              \
        regex.o                 \
        regexec.o               \
        regfree.o               \
        wordexp.o

VALUES=                         \
        values-Xa.o

MOSTOBJS=                       \
        $(STRETS)               \
        $(CRTOBJS)              \
        $(DYNOBJS)              \
        $(FPOBJS)               \
        $(I386FPOBJS)           \
        $(FPASMOBJS)            \
        $(ATOMICOBJS)           \
        $(CHACHAOBJS)           \
        $(XATTROBJS)            \
        $(COMOBJS)              \
        $(GENOBJS)              \
        $(PORTFP)               \
        $(PORTGEN)              \
        $(PORTGEN64)            \
        $(PORTI18N)             \
        $(PORTI18N_COND)        \
        $(PORTINET)             \
        $(PORTLOCALE)           \
        $(PORTPRINT)            \
        $(PORTPRINT_W)          \
        $(PORTREGEX)            \
        $(PORTSTDIO)            \
        $(PORTSTDIO64)          \
```

```
        $(PORTSTDIO_W)          \
        $(PORTSYS)              \
        $(PORTSYS64)            \
        $(AIOOBJS)              \
        $(RTOBJS)               \
        $(SECFLAGSOBJS)         \
        $(TPOOLOBJS)            \
        $(THREADSOBJS)          \
        $(THREADSMACHOBJS)      \
        $(THREADSASMOBJS)       \
        $(UNICODEOBJS)          \
        $(UNWINDMACHOBJS)       \
        $(UNWINDASMOBJS)        \
        $(COMSYSOBJS)           \
        $(SYSOBJS)              \
        $(COMSYSOBJS64)         \
        $(SYSOBJS64)            \
        $(VALUES)

TRACEOBJS=                      \
        plockstat.o

# NOTE: libc.so.1 must be linked with the minimal crti.o and crtn.o
# modules whose source is provided in the $(SRC)/lib/crt directory.
# This must be done because otherwise the Sun C compiler would insert
# its own versions of these modules and those versions contain code
# to call out to C++ initialization functions.  Such C++ initialization
# functions can call back into libc before thread initialization is
# complete and this leads to segmentation violations and other problems.
# Since libc contains no C++ code, linking with the minimal crti.o and
# crtn.o modules is safe and avoids the problems described above.
OBJECTS= $(CRTI) $(MOSTOBJS) $(CRTN)
CRTSRCS= ../../crt/amd64

# include common library definitions
include ../../Makefile.lib
include ../../Makefile.lib.64

CFLAGS64 += $(CTF_FLAGS)

# This is necessary to avoid problems with calling _ex_unwind().
# We probably don’t want any inlining anyway.
CFLAGS64 += -xinline=

CERRWARN += -_gcc=-Wno-parentheses
CERRWARN += -_gcc=-Wno-switch
CERRWARN += -_gcc=-Wno-uninitialized
CERRWARN += -_gcc=-Wno-unused-value
CERRWARN += -_gcc=-Wno-unused-label
CERRWARN += -_gcc=-Wno-unused-variable
CERRWARN += -_gcc=-Wno-type-limits
CERRWARN += -_gcc=-Wno-char-subscripts
CERRWARN += -_gcc=-Wno-clobbered
CERRWARN += -_gcc=-Wno-unused-function
CERRWARN += -_gcc=-Wno-address

$(RELEASE_BUILD)CERRWARN += -_gcc=-Wno-unused

# not linted
SMATCH=off

# Setting THREAD_DEBUG = -DTHREAD_DEBUG (make THREAD_DEBUG=-DTHREAD_DEBUG ...)
# enables ASSERT() checking in the threads portion of the library.
# This is automatically enabled for DEBUG builds, not for non-debug builds.
THREAD_DEBUG =
$(NOT_RELEASE_BUILD)THREAD_DEBUG = -DTHREAD_DEBUG
```

```
# Make string literals read-only to save memory
CFLAGS64 += $(XSTRCONST)

ALTPICS= $(TRACEOBJS:%=pics/%)

$(DYNLIB) := BUILD.SO = $(LD) -o $@ -G $(DYNFLAGS) $(PICS) $(ALTPICS) $(EXTPICS)

MAPFILES =      $(LIBCDIR)/port/mapfile-vers

CPPFLAGS=       -D_REENTRANT -D$(MACH64) -D__$(MACH64) $(THREAD_DEBUG) \
                -I. -I$(LIBCBASE)/inc -I$(LIBCDIR)/inc $(CPPFLAGS.master)
ASFLAGS=        $(AS_PICFLAGS) -P -D__STDC__ -D_ASM $(CPPFLAGS) \
                $(amd64_AS_XARCH)

# As a favor to the dtrace syscall provider, libc still calls the
# old syscall traps that have been obsoleted by the *at() interfaces.
# Delete this to compile libc using only the new *at() system call traps
CPPFLAGS += -D_RETAIN_OLD_SYSCALLS

# proc64_id.o is built with defines in $(SRC)/uts/intel/sys/x86_archext.h
pics/proc64_id.o        := CFLAGS64 += -I$(SRC)/uts/intel

# Inform the run-time linker about libc specialized initialization
RTLDINFO =      -z rtldinfo=tls_rtldinfo
DYNFLAGS +=     $(RTLDINFO)

# Force libc’s internal references to be resolved immediately upon loading
# in order to avoid critical region problems.  Since almost all libc symbols
# are marked ’protected’ in the mapfiles, this is a minimal set (15 to 20).
DYNFLAGS +=     -znow

BUILD.s=        $(AS) $(ASFLAGS) $< -o $@

# Override this top level flag so the compiler builds in its native
# C99 mode.  This has been enabled to support the complex arithmetic
# added to libc.
CSTD=   $(CSTD_GNU99)

# libc method of building an archive
# The "$(GREP) -v ’ L ’" part is necessary only until
# lorder is fixed to ignore thread-local variables.
BUILD.AR= $(RM) $@ ; \
        $(AR) q $@ ‘$(LORDER) $(MOSTOBJS:%=$(DIR)/%) | $(GREP) -v ’ L ’ | $(TSOR

# extra files for the clean target
CLEANFILES +=                   \
        $(LIBCDIR)/port/gen/errlst.c    \
        $(LIBCDIR)/port/gen/new_list.c  \
        assym.h                 \
        genassym                \
        crt/_rtld.s             \
        pics/crti.o             \
        pics/crtn.o             \
        $(ALTPICS)

CLOBBERFILES += $(LIB_PIC)

# conditional assignments
# $(DYNLIB) $(LIB_PIC) := DYNOBJS = _rtbootld.o
$(DYNLIB) := CRTI = crti.o
$(DYNLIB) := CRTN = crtn.o

# Files which need the threads .il inline template
TIL=                            \
        aio.o                   \
```

```
        alloc.o                 \
        assfail.o               \
        atexit.o                \
        atfork.o                \
        cancel.o                \
        door_calls.o            \
        err.o                   \
        errno.o                 \
        lwp.o                   \
        ma.o                    \
        machdep.o               \
        posix_aio.o             \
        pthr_attr.o             \
        pthr_barrier.o          \
        pthr_cond.o             \
        pthr_mutex.o            \
        pthr_rwlock.o           \
        pthread.o               \
        rand.o                  \
        rwlock.o                \
        scalls.o                \
        sched.o                 \
        sema.o                  \
        sigaction.o             \
        sigev_thread.o          \
        spawn.o                 \
        stack.o                 \
        synch.o                 \
        tdb_agent.o             \
        thr.o                   \
        thread_interface.o      \
        thread_pool.o           \
        thrp_unwind.o           \
        tls.o                   \
        tmem.o                  \
        tsd.o

$(TIL:%=pics/%) := CFLAGS64 += $(LIBCBASE)/threads/amd64.il

# pics/mul64.o := CFLAGS64 += crt/mul64.il

# large-file-aware components that should be built large

#$(COMSYSOBJS64:%=pics/%) := \
#       CPPFLAGS += -D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64

#$(SYSOBJS64:%=pics/%) := \
#       CPPFLAGS += -D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64

#$(PORTGEN64:%=pics/%) := \
#       CPPFLAGS += -D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64

#$(PORTSTDIO64:%=pics/%) := \
#       CPPFLAGS += -D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64

#$(PORTSYS64:%=pics/%) := \
#       CPPFLAGS += -D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64

$(PORTSTDIO_W:%=pics/%) := \
        CPPFLAGS += -D_WIDE

$(PORTPRINT_W:%=pics/%) := \
        CPPFLAGS += -D_WIDE

$(PORTPRINT_C89:%=pics/%) := \
        CPPFLAGS += -D_C89_INTMAX32
```

```
$(PORTSTDIO_C89:%=pics/%) := \
        CPPFLAGS += -D_C89_INTMAX32

$(PORTI18N_COND:%=pics/%) := \
        CPPFLAGS += -D_WCS_LONGLONG

pics/arc4random.o :=    CPPFLAGS += -I$(SRC)/common/crypto/chacha

pics/__clock_gettime.o := CPPFLAGS += $(COMMPAGE_CPPFLAGS)

.KEEP_STATE:

all: $(LIBS) $(LIB_PIC)

# object files that depend on inline template
$(TIL:%=pics/%): $(LIBCBASE)/threads/amd64.il
# pics/mul64.o: crt/mul64.il

# include common libc targets
include ../Makefile.targ

# We need to strip out all CTF data from the static library
$(LIB_PIC) := DIR = pics
$(LIB_PIC): pics $$(PICS)
        $(BUILD.AR)
        $(MCS) -d -n .SUNW_ctf $@ > /dev/null 2>&1
        $(AR) -ts $@ > /dev/null
        $(POST_PROCESS_A)

ASSYMDEP_OBJS=                  \
        _lwp_mutex_unlock.o     \
        _stack_grow.o           \
        asm_subr.o              \
        getcontext.o            \
        setjmp.o                \
        tls_get_addr.o          \
        vforkx.o

$(ASSYMDEP_OBJS:%=pics/%): assym.h

# assym.h build rules

GENASSYM_C = genassym.c

genassym: $(GENASSYM_C)
        $(NATIVECC) $(NATIVE_CFLAGS) -Iinc -I$(LIBCDIR)/inc $(CPPFLAGS.native) \
                -o $@ $(GENASSYM_C)

OFFSETS = $(LIBCDIR)/$(MACH)/offsets.in

assym.h: $(OFFSETS) genassym
        $(OFFSETS_CREATE) <$(OFFSETS) >$@
        ./genassym >>$@

# derived C source and related explicit dependencies
$(LIBCDIR)/port/gen/errlst.c + \
$(LIBCDIR)/port/gen/new_list.c: $(LIBCDIR)/port/gen/errlist $(LIBCDIR)/port/gen/
        cd $(LIBCDIR)/port/gen; pwd; $(AWK) -f errlist.awk < errlist

pics/errlst.o: $(LIBCDIR)/port/gen/errlst.c

pics/new_list.o: $(LIBCDIR)/port/gen/new_list.c
```

```
**********************************************************
   23639 Wed Apr 24 01:32:51 2019
new/usr/src/lib/libc/i386/Makefile.com
10804 Enable unused warnings outside of uts
Reviewed by: Andy Stormont <astormont@racktopsystems.com>
Reviewed by: Toomas Soome <tsoome@me.com>
**********************************************************
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#

LIBCDIR=        $(SRC)/lib/libc
LIB_PIC=        libc_pic.a
VERS=           .1
CPP=            /usr/lib/cpp
TARGET_ARCH=    i386

# include comm page definitions
include $(SRC)/lib/commpage/Makefile.shared.com
include $(SRC)/lib/commpage/Makefile.shared.targ

VALUES=         values-Xa.o

# objects are grouped by source directory

# local objects
STRETS=

CRTOBJS=                        \
        cerror.o                \
        cerror64.o

DYNOBJS=                        \
        _rtbootld.o

FPOBJS=                         \
        _D_cplx_div.o           \
        _D_cplx_div_ix.o        \
        _D_cplx_div_rx.o        \
        _D_cplx_lr_div.o        \
```

```
        _D_cplx_lr_div_ix.o     \
        _D_cplx_lr_div_rx.o     \
        _D_cplx_mul.o           \
        _F_cplx_div.o           \
        _F_cplx_div_ix.o        \
        _F_cplx_div_rx.o        \
        _F_cplx_lr_div.o        \
        _F_cplx_lr_div_ix.o     \
        _F_cplx_lr_div_rx.o     \
        _F_cplx_mul.o           \
        _X_cplx_div.o           \
        _X_cplx_div_ix.o        \
        _X_cplx_div_rx.o        \
        _X_cplx_lr_div.o        \
        _X_cplx_lr_div_ix.o     \
        _X_cplx_lr_div_rx.o     \
        _X_cplx_mul.o           \
        fpgetmask.o             \
        fpgetround.o            \
        fpgetsticky.o           \
        fpsetmask.o             \
        fpsetround.o            \
        fpsetsticky.o           \
        fpstart.o               \
        ieee.o

FPASMOBJS=                      \
        __xgetRD.o              \
        _base_il.o              \
        _xtoll.o                \
        _xtoull.o               \
        fpcw.o

ATOMICOBJS=                     \
        atomic.o

CHACHAOBJS=                     \
        chacha.o

XATTROBJS=                      \
        xattr_common.o

COMOBJS=                        \
        bcmp.o                  \
        bcopy.o                 \
        bsearch.o               \
        bzero.o                 \
        qsort.o                 \
        strtol.o                \
        strtoul.o               \
        strtoll.o               \
        strtoull.o

DTRACEOBJS=                     \
        dtrace_data.o

SECFLAGSOBJS=                   \
        secflags.o

GENOBJS=                        \
        $(COMMPAGE_OBJS)        \
        _div64.o                \
        _divdi3.o               \
        _getsp.o                \
        _mul64.o                \
        abs.o                   \
        alloca.o                \
        arc4random.o            \
        arc4random_uniform.o    \
        byteorder.o             \
        byteorder64.o           \
        cuexit.o                \
        ecvt.o                  \
        endian.o                \
        errlst.o                \
        i386_data.o             \
        ladd.o                  \
        ldivide.o               \
        lmul.o                  \
        lock.o                  \
        lshiftl.o               \
        lsign.o                 \
        lsub.o                  \
        makectxt.o              \
        memccpy.o               \
        memchr.o                \
        memcmp.o                \
        memcpy.o                \
        memset.o                \
        new_list.o              \
        setjmp.o                \
        siginfolst.o            \
        siglongjmp.o            \
        strcat.o                \
        strchr.o                \
        strcmp.o                \
        strcpy.o                \
        strlen.o                \
        strncat.o               \
        strncmp.o               \
        strncpy.o               \
        strnlen.o               \
        strrchr.o               \
        sync_instruction_memory.o

# sysobjs that contain large-file interfaces
COMSYSOBJS64=                   \
        fstatvfs64.o            \
        getdents64.o            \
        getrlimit64.o           \
        lseek64.o               \
        mmap64.o                \
        pread64.o               \
        preadv64.o              \
        pwrite64.o              \
        pwritev64.o             \
        setrlimit64.o           \
        statvfs64.o

SYSOBJS64=

COMSYSOBJS=                     \
        __clock_timer.o         \
        __getloadavg.o          \
        __rusagesys.o           \
        __signotify.o           \
        __sigrt.o               \
        __time.o                \
        _lgrp_home_fast.o       \
        _lgrpsys.o              \
        _nfssys.o               \
        _portfs.o               \
```

```
        _pset.o                 \
        _rpcsys.o               \
        _sigaction.o            \
        _so_accept.o            \
        _so_bind.o              \
        _so_connect.o           \
        _so_getpeername.o       \
        _so_getsockname.o       \
        _so_getsockopt.o        \
        _so_listen.o            \
        _so_recv.o              \
        _so_recvfrom.o          \
        _so_recvmsg.o           \
        _so_send.o              \
        _so_sendmsg.o           \
        _so_sendto.o            \
        _so_setsockopt.o        \
        _so_shutdown.o          \
        _so_socket.o            \
        _so_socketpair.o        \
        _sockconfig.o           \
        acct.o                  \
        acl.o                   \
        adjtime.o               \
        alarm.o                 \
        brk.o                   \
        chdir.o                 \
        chroot.o                \
        cladm.o                 \
        close.o                 \
        execve.o                \
        exit.o                  \
        facl.o                  \
        fchdir.o                \
        fchroot.o               \
        fdsync.o                \
        fpathconf.o             \
        fstatfs.o               \
        fstatvfs.o              \
        getcpuid.o              \
        getdents.o              \
        getegid.o               \
        geteuid.o               \
        getgid.o                \
        getgroups.o             \
        gethrtime.o             \
        getitimer.o             \
        getmsg.o                \
        getpid.o                \
        getpmsg.o               \
        getppid.o               \
        getrandom.o             \
        getrlimit.o             \
        getuid.o                \
        gtty.o                  \
        install_utrap.o         \
        ioctl.o                 \
        kaio.o                  \
        kill.o                  \
        llseek.o                \
        lseek.o                 \
        mmapobjsys.o            \
        memcntl.o               \
        mincore.o               \
        mmap.o                  \
        modctl.o                \
        mount.o                 \
        mprotect.o              \
        munmap.o                \
        nice.o                  \
        ntp_adjtime.o           \
        ntp_gettime.o           \
        p_online.o              \
        pathconf.o              \
        pause.o                 \
        pcsample.o              \
        pipe2.o                 \
        pollsys.o               \
        pread.o                 \
        preadv.o                \
        priocntlset.o           \
        processor_bind.o        \
        processor_info.o        \
        profil.o                \
        psecflagsset.o          \
        putmsg.o                \
        putpmsg.o               \
        pwrite.o                \
        pwritev.o               \
        read.o                  \
        readv.o                 \
        resolvepath.o           \
        seteguid.o              \
        setgid.o                \
        setgroups.o             \
        setitimer.o             \
        setreid.o               \
        setrlimit.o             \
        setuid.o                \
        sigaltstk.o             \
        sigprocmsk.o            \
        sigsendset.o            \
        sigsuspend.o            \
        statfs.o                \
        statvfs.o               \
        stty.o                  \
        sync.o                  \
        sysconfig.o             \
        sysfs.o                 \
        sysinfo.o               \
        syslwp.o                \
        times.o                 \
        ulimit.o                \
        umask.o                 \
        umount2.o               \
        utssys.o                \
        uucopy.o                \
        vhangup.o               \
        waitid.o                \
        write.o                 \
        writev.o                \
        yield.o

SYSOBJS=                        \
        __clock_gettime.o       \
        __clock_gettime_sys.o   \
        __getcontext.o          \
        __uadmin.o              \
        _lwp_mutex_unlock.o     \
        _stack_grow.o           \
        door.o                  \
        forkx.o                 \
```

```
        forkallx.o              \
        getcontext.o            \
        gettimeofday.o          \
        lwp_private.o           \
        nuname.o                \
        ptrace.o                \
        syscall.o               \
        sysi86.o                \
        tls_get_addr.o          \
        uadmin.o                \
        umount.o                \
        uname.o                 \
        vforkx.o                \
        xstat.o

# objects under $(LIBCDIR)/port which contain transitional large file interfaces
PORTGEN64=                      \
        _xftw64.o               \
        attropen64.o            \
        fts64.o                 \
        ftw64.o                 \
        mkstemp64.o             \
        nftw64.o                \
        tell64.o                \
        truncate64.o

# objects from source under $(LIBCDIR)/port
PORTFP=                         \
        __flt_decim.o           \
        __flt_rounds.o          \
        __tbl_10_b.o            \
        __tbl_10_h.o            \
        __tbl_10_s.o            \
        __tbl_2_b.o             \
        __tbl_2_h.o             \
        __tbl_2_s.o             \
        __tbl_fdq.o             \
        __tbl_tens.o            \
        __x_power.o             \
        _base_sup.o             \
        aconvert.o              \
        decimal_bin.o           \
        double_decim.o          \
        econvert.o              \
        fconvert.o              \
        file_decim.o            \
        finite.o                \
        fp_data.o               \
        func_decim.o            \
        gconvert.o              \
        hex_bin.o               \
        ieee_globals.o          \
        pack_float.o            \
        sigfpe.o                \
        string_decim.o

PORTGEN=                        \
        _env_data.o             \
        _xftw.o                 \
        a64l.o                  \
        abort.o                 \
        addsev.o                \
        ascii_strcasecmp.o      \
        ascii_strncasecmp.o     \
        assert.o                \
        atexit.o                \
        atfork.o                \
        atof.o                  \
        atoi.o                  \
        atol.o                  \
        atoll.o                 \
        attrat.o                \
        attropen.o              \
        basename.o              \
        calloc.o                \
        catgets.o               \
        catopen.o               \
        cfgetispeed.o           \
        cfgetospeed.o           \
        cfree.o                 \
        cfsetispeed.o           \
        cfsetospeed.o           \
        cftime.o                \
        clock.o                 \
        closedir.o              \
        closefrom.o             \
        confstr.o               \
        crypt.o                 \
        csetlen.o               \
        ctime.o                 \
        ctime_r.o               \
        daemon.o                \
        deflt.o                 \
        directio.o              \
        dirname.o               \
        div.o                   \
        drand48.o               \
        dup.o                   \
        env_data.o              \
        err.o                   \
        errno.o                 \
        euclen.o                \
        event_port.o            \
        execvp.o                \
        explicit_bzero.o        \
        fattach.o               \
        fdetach.o               \
        fdopendir.o             \
        ffs.o                   \
        flock.o                 \
        fls.o                   \
        fmtmsg.o                \
        freezero.o              \
        ftime.o                 \
        ftok.o                  \
        fts.o                   \
        ftw.o                   \
        gcvt.o                  \
        get_nprocs.o            \
        getauxv.o               \
        getcwd.o                \
        getdate_err.o           \
        getdtblsize.o           \
        getentropy.o            \
        getenv.o                \
        getexecname.o           \
        getgrnam.o              \
        getgrnam_r.o            \
        gethostid.o             \
        gethostname.o           \
        gethz.o                 \
        getisax.o               \
```

```
        getloadavg.o            \
        getlogin.o              \
        getmntent.o             \
        getnetgrent.o           \
        getopt.o                \
        getopt_long.o           \
        getpagesize.o           \
        getpw.o                 \
        getpwnam.o              \
        getpwnam_r.o            \
        getrusage.o             \
        getspent.o              \
        getspent_r.o            \
        getsubopt.o             \
        gettxt.o                \
        getusershell.o          \
        getut.o                 \
        getutx.o                \
        getvfsent.o             \
        getwd.o                 \
        getwidth.o              \
        getxby_door.o           \
        gtxt.o                  \
        hsearch.o               \
        iconv.o                 \
        imaxabs.o               \
        imaxdiv.o               \
        index.o                 \
        initgroups.o            \
        insque.o                \
        isaexec.o               \
        isastream.o             \
        isatty.o                \
        killpg.o                \
        klpdlib.o               \
        l64a.o                  \
        lckpwdf.o               \
        lconstants.o            \
        lexp10.o                \
        lfind.o                 \
        lfmt.o                  \
        lfmt_log.o              \
        llabs.o                 \
        lldiv.o                 \
        llog10.o                \
        lltostr.o               \
        localtime.o             \
        lsearch.o               \
        madvise.o               \
        malloc.o                \
        memalign.o              \
        memmem.o                \
        memset_s.o              \
        mkdev.o                 \
        mkdtemp.o               \
        mkfifo.o                \
        mkstemp.o               \
        mktemp.o                \
        mlock.o                 \
        mlockall.o              \
        mon.o                   \
        msync.o                 \
        munlock.o               \
        munlockall.o            \
        ndbm.o                  \
        nftw.o                  \
        nlspath_checks.o        \
        nsparse.o               \
        nss_common.o            \
        nss_dbdefs.o            \
        nss_deffinder.o         \
        opendir.o               \
        opt_data.o              \
        perror.o                \
        pfmt.o                  \
        pfmt_data.o             \
        pfmt_print.o            \
        pipe.o                  \
        plock.o                 \
        poll.o                  \
        posix_fadvise.o         \
        posix_fallocate.o       \
        posix_madvise.o         \
        posix_memalign.o        \
        priocntl.o              \
        priv_str_xlate.o        \
        privlib.o               \
        psecflags.o             \
        psiginfo.o              \
        psignal.o               \
        pt.o                    \
        putpwent.o              \
        putspent.o              \
        raise.o                 \
        rand.o                  \
        random.o                \
        rctlops.o               \
        readdir.o               \
        readdir_r.o             \
        reallocarray.o          \
        recallocarray.o         \
        realpath.o              \
        reboot.o                \
        regexpr.o               \
        remove.o                \
        rewinddir.o             \
        rindex.o                \
        scandir.o               \
        seekdir.o               \
        select.o                \
        set_constraint_handler_s.o \
        setlabel.o              \
        setpriority.o           \
        settimeofday.o          \
        sh_locks.o              \
        sigflag.o               \
        siglist.o               \
        sigsend.o               \
        sigsetops.o             \
        ssignal.o               \
        stack.o                 \
        stpcpy.o                \
        stpncpy.o               \
        str2sig.o               \
        strcase_charmap.o       \
        strchrnul.o             \
        strcspn.o               \
        strdup.o                \
        strerror.o              \
        strlcat.o               \
        strlcpy.o               \
        strndup.o               \
```

```
        strpbrk.o               \
        strsep.o                \
        strsignal.o             \
        strspn.o                \
        strstr.o                \
        strtod.o                \
        strtoimax.o             \
        strtok.o                \
        strtok_r.o              \
        strtonum.o              \
        strtoumax.o             \
        swab.o                  \
        swapctl.o               \
        sysconf.o               \
        syslog.o                \
        tcdrain.o               \
        tcflow.o                \
        tcflush.o               \
        tcgetattr.o             \
        tcgetpgrp.o             \
        tcgetsid.o              \
        tcsendbreak.o           \
        tcsetattr.o             \
        tcsetpgrp.o             \
        tell.o                  \
        telldir.o               \
        tfind.o                 \
        time_data.o             \
        time_gdata.o            \
        timespec_get.o          \
        tls_data.o              \
        truncate.o              \
        tsdalloc.o              \
        tsearch.o               \
        ttyname.o               \
        ttyslot.o               \
        ualarm.o                \
        ucred.o                 \
        valloc.o                \
        vlfmt.o                 \
        vpfmt.o                 \
        waitpid.o               \
        walkstack.o             \
        wdata.o                 \
        xgetwidth.o             \
        xpg4.o                  \
        xpg6.o

PORTINET=                       \
        inet_lnaof.o            \
        inet_makeaddr.o         \
        inet_network.o          \
        inet_ntoa.o             \
        inet_ntop.o             \
        inet_pton.o

PORTPRINT_W=                    \
        doprnt_w.o

PORTPRINT=                      \
        asprintf.o              \
        doprnt.o                \
        fprintf.o               \
        printf.o                \
        snprintf.o              \
        sprintf.o               \
        vfprintf.o              \
        vprintf.o               \
        vsnprintf.o             \
        vsprintf.o              \
        vwprintf.o              \
        wprintf.o

# c89 variants to support 32-bit size of c89 u/intmax_t (32-bit libc only)
PORTPRINT_C89=                  \
        vfprintf_c89.o          \
        vprintf_c89.o           \
        vsnprintf_c89.o         \
        vsprintf_c89.o          \
        vwprintf_c89.o

PORTSTDIO_C89=                  \
        vscanf_c89.o            \
        vwscanf_c89.o           \

# portable stdio objects that contain large file interfaces.
# Note: fopen64 is a special case, as we build it small.
PORTSTDIO64=                    \
        fopen64.o               \
        fpos64.o

PORTSTDIO_W=                    \
        doscan_w.o

PORTSTDIO=                      \
        __extensions.o          \
        _endopen.o              \
        _filbuf.o               \
        _findbuf.o              \
        _flsbuf.o               \
        _wrtchk.o               \
        clearerr.o              \
        ctermid.o               \
        ctermid_r.o             \
        cuserid.o               \
        data.o                  \
        doscan.o                \
        fdopen.o                \
        feof.o                  \
        ferror.o                \
        fgetc.o                 \
        fgets.o                 \
        fileno.o                \
        flockf.o                \
        flush.o                 \
        fopen.o                 \
        fpos.o                  \
        fputc.o                 \
        fputs.o                 \
        fread.o                 \
        fseek.o                 \
        fseeko.o                \
        ftell.o                 \
        ftello.o                \
        fwrite.o                \
        getc.o                  \
        getchar.o               \
        getline.o               \
        getpass.o               \
        gets.o                  \
        getw.o                  \
        mse.o                   \
```

```
        popen.o                 \
        putc.o                  \
        putchar.o               \
        puts.o                  \
        putw.o                  \
        rewind.o                \
        scanf.o                 \
        setbuf.o                \
        setbuffer.o             \
        setvbuf.o               \
        system.o                \
        tempnam.o               \
        tmpfile.o               \
        tmpnam_r.o              \
        ungetc.o                \
        vscanf.o                \
        vwscanf.o               \
        wscanf.o

PORTI18N=                       \
        getwchar.o              \
        putwchar.o              \
        putws.o                 \
        strtows.o               \
        wcsnlen.o               \
        wcsstr.o                \
        wcstoimax.o             \
        wcstol.o                \
        wcstoul.o               \
        wcswcs.o                \
        wmemchr.o               \
        wmemcmp.o               \
        wmemcpy.o               \
        wmemmove.o              \
        wmemset.o               \
        wscat.o                 \
        wschr.o                 \
        wscmp.o                 \
        wscpy.o                 \
        wscspn.o                \
        wsdup.o                 \
        wslen.o                 \
        wsncat.o                \
        wsncmp.o                \
        wsncpy.o                \
        wspbrk.o                \
        wsprintf.o              \
        wsrchr.o                \
        wsscanf.o               \
        wsspn.o                 \
        wstod.o                 \
        wstok.o                 \
        wstol.o                 \
        wstoll.o                \
        wsxfrm.o                \
        gettext.o               \
        gettext_gnu.o           \
        gettext_real.o          \
        gettext_util.o          \
        plural_parser.o         \
        wdresolve.o             \
        _ctype.o                \
        isascii.o               \
        toascii.o

PORTI18N_COND=                  \
        wcstol_longlong.o       \
        wcstoul_longlong.o

PORTLOCALE=                     \
        big5.o                  \
        btowc.o                 \
        collate.o               \
        collcmp.o               \
        euc.o                   \
        fnmatch.o               \
        fgetwc.o                \
        fgetws.o                \
        fix_grouping.o          \
        fputwc.o                \
        fputws.o                \
        fwide.o                 \
        gb18030.o               \
        gb2312.o                \
        gbk.o                   \
        getdate.o               \
        isdigit.o               \
        iswctype.o              \
        ldpart.o                \
        lmessages.o             \
        lnumeric.o              \
        lmonetary.o             \
        localeconv.o            \
        localeimpl.o            \
        mbftowc.o               \
        mblen.o                 \
        mbrlen.o                \
        mbrtowc.o               \
        mbsinit.o               \
        mbsnrtowcs.o            \
        mbsrtowcs.o             \
        mbstowcs.o              \
        mbtowc.o                \
        mskanji.o               \
        nextwctype.o            \
        nl_langinfo.o           \
        none.o                  \
        rune.o                  \
        runetype.o              \
        setlocale.o             \
        setrunelocale.o         \
        strcasecmp.o            \
        strcasestr.o            \
        strcoll.o               \
        strfmon.o               \
        strftime.o              \
        strncasecmp.o           \
        strptime.o              \
        strxfrm.o               \
        table.o                 \
        timelocal.o             \
        tolower.o               \
        towlower.o              \
        ungetwc.o               \
        utf8.o                  \
        wcrtomb.o               \
        wcscasecmp.o            \
        wcscoll.o               \
        wcsftime.o              \
        wcsnrtombs.o            \
        wcsrtombs.o             \
        wcswidth.o              \
```

```
        wcstombs.o              \
        wcsxfrm.o               \
        wctob.o                 \
        wctomb.o                \
        wctrans.o               \
        wctype.o                \
        wcwidth.o               \
        wscol.o

AIOOBJS=                        \
        aio.o                   \
        aio_alloc.o             \
        posix_aio.o

RTOBJS=                         \
        clock_timer.o           \
        mqueue.o                \
        pos4obj.o               \
        sched.o                 \
        sem.o                   \
        shm.o                   \
        sigev_thread.o

TPOOLOBJS=                      \
        thread_pool.o

THREADSOBJS=                    \
        alloc.o                 \
        assfail.o               \
        cancel.o                \
        c11_thr.o               \
        door_calls.o            \
        tmem.o                  \
        pthr_attr.o             \
        pthr_barrier.o          \
        pthr_cond.o             \
        pthr_mutex.o            \
        pthr_rwlock.o           \
        pthread.o               \
        rwlock.o                \
        scalls.o                \
        sema.o                  \
        sigaction.o             \
        spawn.o                 \
        synch.o                 \
        tdb_agent.o             \
        thr.o                   \
        thread_interface.o      \
        tls.o                   \
        tsd.o

THREADSMACHOBJS=                \
        machdep.o

THREADSASMOBJS=                 \
        asm_subr.o

UNICODEOBJS=                    \
        u8_textprep.o           \
        uconv.o

UNWINDMACHOBJS=                 \
        unwind.o

UNWINDASMOBJS=                  \
        unwind_frame.o
```

```
# objects that implement the transitional large file API
PORTSYS64=                      \
        lockf64.o               \
        stat64.o

PORTSYS=                        \
        _autofssys.o            \
        access.o                \
        acctctl.o               \
        bsd_signal.o            \
        chmod.o                 \
        chown.o                 \
        corectl.o               \
        epoll.o                 \
        eventfd.o               \
        exacctsys.o             \
        execl.o                 \
        execle.o                \
        execv.o                 \
        fcntl.o                 \
        getpagesizes.o          \
        getpeerucred.o          \
        inst_sync.o             \
        issetugid.o             \
        label.o                 \
        link.o                  \
        lockf.o                 \
        lwp.o                   \
        lwp_cond.o              \
        lwp_rwlock.o            \
        lwp_sigmask.o           \
        meminfosys.o            \
        mkdir.o                 \
        mknod.o                 \
        msgsys.o                \
        nfssys.o                \
        open.o                  \
        pgrpsys.o               \
        posix_sigwait.o         \
        ppriv.o                 \
        psetsys.o               \
        rctlsys.o               \
        readlink.o              \
        rename.o                \
        sbrk.o                  \
        semsys.o                \
        set_errno.o             \
        sharefs.o               \
        shmsys.o                \
        sidsys.o                \
        siginterrupt.o          \
        signal.o                \
        signalfd.o              \
        sigpending.o            \
        sigstack.o              \
        stat.o                  \
        symlink.o               \
        tasksys.o               \
        time.o                  \
        time_util.o             \
        timerfd.o               \
        ucontext.o              \
        unlink.o                \
        ustat.o                 \
        utimesys.o              \
```

```
        zone.o

PORTREGEX=                      \
        glob.o                  \
        regcmp.o                \
        regcomp.o               \
        regerror.o              \
        regex.o                 \
        regexec.o               \
        regfree.o               \
        wordexp.o

PORTREGEX64=                    \
        glob64.o

MOSTOBJS=                       \
        $(STRETS)               \
        $(CRTOBJS)              \
        $(DYNOBJS)              \
        $(FPOBJS)               \
        $(FPASMOBJS)            \
        $(ATOMICOBJS)           \
        $(CHACHAOBJS)           \
        $(XATTROBJS)            \
        $(COMOBJS)              \
        $(DTRACEOBJS)           \
        $(GENOBJS)              \
        $(PORTFP)               \
        $(PORTGEN)              \
        $(PORTGEN64)            \
        $(PORTI18N)             \
        $(PORTI18N_COND)        \
        $(PORTINET)             \
        $(PORTLOCALE)           \
        $(PORTPRINT)            \
        $(PORTPRINT_C89)        \
        $(PORTPRINT_W)          \
        $(PORTREGEX)            \
        $(PORTREGEX64)          \
        $(PORTSTDIO)            \
        $(PORTSTDIO64)          \
        $(PORTSTDIO_C89)        \
        $(PORTSTDIO_W)          \
        $(PORTSYS)              \
        $(PORTSYS64)            \
        $(AIOOBJS)              \
        $(RTOBJS)               \
        $(SECFLAGSOBJS)         \
        $(TPOOLOBJS)            \
        $(THREADSOBJS)          \
        $(THREADSMACHOBJS)      \
        $(THREADSASMOBJS)       \
        $(UNICODEOBJS)          \
        $(UNWINDMACHOBJS)       \
        $(UNWINDASMOBJS)        \
        $(COMSYSOBJS)           \
        $(SYSOBJS)              \
        $(COMSYSOBJS64)         \
        $(SYSOBJS64)            \
        $(VALUES)

TRACEOBJS=                      \
        plockstat.o

# NOTE: libc.so.1 must be linked with the minimal crti.o and crtn.o
# modules whose source is provided in the $(SRC)/lib/crt directory.
# This must be done because otherwise the Sun C compiler would insert
# its own versions of these modules and those versions contain code
# to call out to C++ initialization functions.  Such C++ initialization
# functions can call back into libc before thread initialization is
# complete and this leads to segmentation violations and other problems.
# Since libc contains no C++ code, linking with the minimal crti.o and
# crtn.o modules is safe and avoids the problems described above.
OBJECTS= $(CRTI) $(MOSTOBJS) $(CRTN)
CRTSRCS= ../../crt/i386

LDPASS_OFF=     $(POUND_SIGN)

# include common library definitions
include ../../Makefile.lib

# we need to override the default SONAME here because we might
# be building a variant object (still libc.so.1, but different filename)
SONAME = libc.so.1

CFLAGS += $(CCVERBOSE) $(CTF_FLAGS)

# This is necessary to avoid problems with calling _ex_unwind().
# We probably don't want any inlining anyway.
XINLINE = -xinline=
CFLAGS += $(XINLINE)

CERRWARN += -_gcc=-Wno-parentheses
CERRWARN += -_gcc=-Wno-switch
CERRWARN += -_gcc=-Wno-uninitialized
CERRWARN += -_gcc=-Wno-unused-value
CERRWARN += -_gcc=-Wno-unused-label
CERRWARN += -_gcc=-Wno-unused-variable
CERRWARN += -_gcc=-Wno-type-limits
CERRWARN += -_gcc=-Wno-char-subscripts
CERRWARN += -_gcc=-Wno-clobbered
CERRWARN += -_gcc=-Wno-unused-function
CERRWARN += -_gcc=-Wno-address

$(RELEASE_BUILD)CERRWARN += -_gcc=-Wno-unused

# not linted
SMATCH=off

# Setting THREAD_DEBUG = -DTHREAD_DEBUG (make THREAD_DEBUG=-DTHREAD_DEBUG ...)
# enables ASSERT() checking in the threads portion of the library.
# This is automatically enabled for DEBUG builds, not for non-debug builds.
THREAD_DEBUG =
$(NOT_RELEASE_BUILD)THREAD_DEBUG = -DTHREAD_DEBUG

# Make string literals read-only to save memory.
CFLAGS += $(XSTRCONST)

ALTPICS= $(TRACEOBJS:%=pics/%)

$(DYNLIB) := BUILD.SO = $(LD) -o $@ -G $(DYNFLAGS) $(PICS) $(ALTPICS) \
                $(EXTPICS) $(LDLIBS)

MAPFILES =      $(LIBCDIR)/port/mapfile-vers

#
# EXTN_CPPFLAGS and EXTN_CFLAGS set in enclosing Makefile
#
CFLAGS +=       $(EXTN_CFLAGS)
CPPFLAGS=       -D_REENTRANT -Di386 $(EXTN_CPPFLAGS) $(THREAD_DEBUG) \
                -I$(LIBCBASE)/inc -I$(LIBCDIR)/inc $(CPPFLAGS.master)
ASFLAGS=        $(AS_PICFLAGS) -P -D__STDC__ -D_ASM $(CPPFLAGS) $(i386_AS_XARCH)
```

```

# As a favor to the dtrace syscall provider, libc still calls the
# old syscall traps that have been obsoleted by the *at() interfaces.
# Delete this to compile libc using only the new *at() system call traps
CPPFLAGS += -D_RETAIN_OLD_SYSCALLS

# Inform the run-time linker about libc specialized initialization
RTLDINFO =      -z rtldinfo=tls_rtldinfo
DYNFLAGS +=     $(RTLDINFO)

# Force libc's internal references to be resolved immediately upon loading
# in order to avoid critical region problems.  Since almost all libc symbols
# are marked 'protected' in the mapfiles, this is a minimal set (15 to 20).
DYNFLAGS +=     -znow

DYNFLAGS +=     -e __rtboot
DYNFLAGS +=     $(EXTN_DYNFLAGS)

# Inform the kernel about the initial DTrace area (in case
# libc is being used as the interpreter / runtime linker).
DTRACE_DATA =   -zdtrace=dtrace_data
DYNFLAGS +=     $(DTRACE_DATA)

# DTrace needs an executable data segment.
MAPFILE.NED=

BUILD.s=        $(AS) $(ASFLAGS) $< -o $@

# Override this top level flag so the compiler builds in its native
# C99 mode.  This has been enabled to support the complex arithmetic
# added to libc.
CSTD=   $(CSTD_GNU99)

# libc method of building an archive
# The "$(GREP) -v ' L '" part is necessary only until
# lorder is fixed to ignore thread-local variables.
BUILD.AR= $(RM) $@ ; \
        $(AR) q $@ `$(LORDER) $(MOSTOBJS:%=$(DIR)/%) | $(GREP) -v ' L ' | $(TSOR

# extra files for the clean target
CLEANFILES +=                   \
        $(LIBCDIR)/port/gen/errlst.c    \
        $(LIBCDIR)/port/gen/new_list.c  \
        assym.h                 \
        genassym                \
        crt/_rtld.s             \
        crt/_rtbootld.s         \
        pics/_rtbootld.o        \
        pics/crti.o             \
        pics/crtn.o             \
        $(ALTPICS)

CLOBBERFILES += $(LIB_PIC)

# conditional assignments
$(DYNLIB) := CRTI = crti.o
$(DYNLIB) := CRTN = crtn.o

# Files which need the threads .il inline template
TIL=                            \
        aio.o                   \
        alloc.o                 \
        assfail.o               \
        atexit.o                \
        atfork.o                \
        cancel.o                \
        door_calls.o            \
        err.o                   \
        errno.o                 \
        lwp.o                   \
        ma.o                    \
        machdep.o               \
        posix_aio.o             \
        pthr_attr.o             \
        pthr_barrier.o          \
        pthr_cond.o             \
        pthr_mutex.o            \
        pthr_rwlock.o           \
        pthread.o               \
        rand.o                  \
        rwlock.o                \
        scalls.o                \
        sched.o                 \
        sema.o                  \
        sigaction.o             \
        sigev_thread.o          \
        spawn.o                 \
        stack.o                 \
        synch.o                 \
        tdb_agent.o             \
        thr.o                   \
        thread_interface.o      \
        thread_pool.o           \
        tls.o                   \
        tsd.o                   \
        tmem.o                  \
        unwind.o

THREADS_INLINES = $(LIBCBASE)/threads/i386.il
$(TIL:%=pics/%) := CFLAGS += $(THREADS_INLINES)

# pics/mul64.o := CFLAGS += $(LIBCBASE)/crt/mul64.il

# large-file-aware components that should be built large

$(COMSYSOBJS64:%=pics/%) := \
        CPPFLAGS += -D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64

$(SYSOBJS64:%=pics/%) := \
        CPPFLAGS += -D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64

$(PORTGEN64:%=pics/%) := \
        CPPFLAGS += -D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64

$(PORTREGEX64:%=pics/%) := \
        CPPFLAGS += -D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64

$(PORTSTDIO64:%=pics/%) := \
        CPPFLAGS += -D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64

$(PORTSYS64:%=pics/%) := \
        CPPFLAGS += -D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64

$(PORTSTDIO_W:%=pics/%) := \
        CPPFLAGS += -D_WIDE

$(PORTPRINT_W:%=pics/%) := \
        CPPFLAGS += -D_WIDE

$(PORTPRINT_C89:%=pics/%) := \
        CPPFLAGS += -D_C89_INTMAX32
```

```
$(PORTSTDIO_C89:%=pics/%) := \
        CPPFLAGS += -D_C89_INTMAX32

$(PORTI18N_COND:%=pics/%) := \
        CPPFLAGS += -D_WCS_LONGLONG

pics/arc4random.o :=    CPPFLAGS += -I$(SRC)/common/crypto/chacha

pics/__clock_gettime.o := CPPFLAGS += $(COMMPAGE_CPPFLAGS)

.KEEP_STATE:

all: $(LIBS) $(LIB_PIC)

# object files that depend on inline template
$(TIL:%=pics/%): $(LIBCBASE)/threads/i386.il
# pics/mul64.o: $(LIBCBASE)/crt/mul64.il

# include common libc targets
include $(LIBCDIR)/Makefile.targ

# We need to strip out all CTF and DOF data from the static library
$(LIB_PIC) := DIR = pics
$(LIB_PIC): pics $$(PICS)
        $(BUILD.AR)
        $(MCS) -d -n .SUNW_ctf $@ > /dev/null 2>&1
        $(MCS) -d -n .SUNW_dof $@ > /dev/null 2>&1
        $(AR) -ts $@ > /dev/null
        $(POST_PROCESS_A)

$(LIBCBASE)/crt/_rtbootld.s: $(LIBCBASE)/crt/_rtboot.s $(LIBCBASE)/crt/_rtld.c
        $(CC) $(CPPFLAGS) -_smatch=off $(CTF_FLAGS) -O -S $(C_PICFLAGS) \
            $(LIBCBASE)/crt/_rtld.c -o $(LIBCBASE)/crt/_rtld.s
        $(CAT) $(LIBCBASE)/crt/_rtboot.s $(LIBCBASE)/crt/_rtld.s > $@
        $(RM) $(LIBCBASE)/crt/_rtld.s

# partially built from C source
pics/_rtbootld.o: $(LIBCBASE)/crt/_rtbootld.s
        $(AS) $(ASFLAGS) $(LIBCBASE)/crt/_rtbootld.s -o $@
        $(CTFCONVERT_O)

ASSYMDEP_OBJS=                  \
        _lwp_mutex_unlock.o     \
        _stack_grow.o           \
        getcontext.o            \
        setjmp.o                \
        tls_get_addr.o          \
        vforkx.o

$(ASSYMDEP_OBJS:%=pics/%)       :=      CPPFLAGS += -I.

$(ASSYMDEP_OBJS:%=pics/%): assym.h

# assym.h build rules

GENASSYM_C = $(LIBCDIR)/$(MACH)/genassym.c

genassym: $(GENASSYM_C)
        $(NATIVECC) $(NATIVE_CFLAGS) -I$(LIBCBASE)/inc -I$(LIBCDIR)/inc \
                -D__EXTENSIONS__ $(CPPFLAGS.native) -o $@ $(GENASSYM_C)

OFFSETS = $(LIBCDIR)/$(MACH)/offsets.in

assym.h: $(OFFSETS) genassym
        $(OFFSETS_CREATE) <$(OFFSETS) >$@
        ./genassym >>$@
```

```
# derived C source and related explicit dependencies
$(LIBCDIR)/port/gen/errlst.c + \
$(LIBCDIR)/port/gen/new_list.c: $(LIBCDIR)/port/gen/errlist $(LIBCDIR)/port/gen/
	cd $(LIBCDIR)/port/gen; pwd; $(AWK) -f errlist.awk < errlist

pics/errlst.o: $(LIBCDIR)/port/gen/errlst.c

pics/new_list.o: $(LIBCDIR)/port/gen/new_list.c
```

```
**********************************************************
    4008 Wed Apr 24 01:32:52 2019
new/usr/src/lib/udapl/udapl_tavor/Makefile.com
10804 Enable unused warnings outside of uts
Reviewed by: Andy Stormont <astormont@racktopsystems.com>
Reviewed by: Toomas Soome <tsoome@me.com>
**********************************************************
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LIBRARY=        udapl_tavor.a
VERS=           .1

LOCOBJS =       \
        dapl_cno_create.o \
        dapl_cno_free.o \
        dapl_cno_modify_agent.o \
        dapl_cno_query.o \
        dapl_cno_util.o \
        dapl_cno_wait.o \
        dapl_cookie.o \
        dapl_cr_accept.o \
        dapl_cr_callback.o \
        dapl_cr_handoff.o \
        dapl_cr_query.o \
        dapl_cr_reject.o \
        dapl_cr_util.o \
        dapl_debug.o \
        dapl_ep_connect.o \
        dapl_ep_create.o \
        dapl_ep_create_with_srq.o \
        dapl_ep_disconnect.o \
        dapl_ep_dup_connect.o \
        dapl_ep_free.o \
        dapl_ep_get_status.o \
        dapl_ep_modify.o \
        dapl_ep_post_rdma_read.o \
        dapl_ep_post_rdma_write.o \
        dapl_ep_post_recv.o \
        dapl_ep_post_send.o \
        dapl_ep_query.o \
        dapl_ep_reset.o \
```

```
        dapl_ep_util.o \
        dapl_evd_clear_unwaitable.o \
        dapl_evd_connection_callb.o \
        dapl_evd_cq_async_error_callb.o \
        dapl_evd_create.o \
        dapl_evd_dequeue.o \
        dapl_evd_disable.o \
        dapl_evd_dto_callb.o \
        dapl_evd_enable.o \
        dapl_evd_free.o \
        dapl_evd_modify_cno.o \
        dapl_evd_post_se.o \
        dapl_evd_qp_async_error_callb.o \
        dapl_evd_query.o \
        dapl_evd_resize.o \
        dapl_evd_set_unwaitable.o \
        dapl_evd_un_async_error_callb.o \
        dapl_evd_util.o \
        dapl_evd_wait.o \
        dapl_get_consumer_context.o \
        dapl_get_handle_type.o \
        dapl_hash.o \
        dapl_hca_util.o \
        dapl_ia_close.o \
        dapl_ia_open.o \
        dapl_ia_query.o \
        dapl_ia_util.o \
        dapl_init.o \
        dapl_llist.o \
        dapl_lmr_create.o \
        dapl_lmr_free.o \
        dapl_lmr_query.o \
        dapl_lmr_sync_rdma.o \
        dapl_lmr_util.o \
        dapl_mr_util.o \
        dapl_name_service.o \
        dapl_osd.o \
        dapl_provider.o \
        dapl_psp_create.o \
        dapl_psp_create_any.o \
        dapl_psp_free.o \
        dapl_psp_query.o \
        dapl_pz_create.o \
        dapl_pz_free.o \
        dapl_pz_query.o \
        dapl_pz_util.o \
        dapl_ring_buffer_util.o \
        dapl_rmr_bind.o \
        dapl_rmr_create.o \
        dapl_rmr_free.o \
        dapl_rmr_query.o \
        dapl_rmr_util.o \
        dapl_rsp_create.o \
        dapl_rsp_free.o \
        dapl_rsp_query.o \
        dapl_set_consumer_context.o \
        dapl_sp_util.o \
        dapl_srq.o \
        dapl_srq_util.o

TAVOROBJS = \
        dapl_tavor_hca.o \
        dapl_tavor_hw.o \
        dapl_arbel_hw.o \
        dapl_hermon_hw.o \
        dapl_tavor_ibtf_cm.o \
        dapl_tavor_ibtf_dto.o \
        dapl_tavor_ibtf_mrsync.o \
        dapl_tavor_ibtf_qp.o \
        dapl_tavor_ibtf_util.o \
        dapl_tavor_wr.o

OBJECTS = $(LOCOBJS) $(TAVOROBJS)

include $(SRC)/lib/Makefile.lib

LIBS =          $(DYNLIB)
LDLIBS +=       -ldevinfo -lsocket -lnsl -ldat -lc -ldladm

SRCDIR =        ../common
TAVORSRCDIR =   ../tavor

SRCS = $(LOCOBJS:%.o=$(SRCDIR)/%.c) $(TAVOROBJS:%.o=$(TAVORSRCDIR)/%.c)

CPPFLAGS +=     -I$(SRC)/lib/udapl/udapl_tavor/include
CPPFLAGS +=     -I$(SRC)/lib/udapl/udapl_tavor/tavor
CPPFLAGS +=     -I$(SRC)/uts/common/sys/ib/clients/daplt
CPPFLAGS +=     -I$(SRC)/uts/common
CPPFLAGS +=     -I$(SRC)/uts/common/sys/ib/clients
CFLAGS +=       $(CCVERBOSE)
LINTFLAGS +=    -DDAPL_DBG
LINTFLAGS64 +=  -DDAPL_DBG

CERRWARN +=     -_gcc=-Wno-parentheses
CERRWARN +=     -_gcc=-Wno-uninitialized
CERRWARN +=     -_gcc=-Wno-switch

$(NOT_RELEASE_BUILD)CPPFLAGS += -DDAPL_DBG
$(RELEASE_BUILD)CERRWARN += -_gcc=-Wno-unused

# not linted
SMATCH=off

$(NOT_RELEASE_BUILD)CPPFLAGS += -DDAPL_DBG

.KEEP_STATE:

all: $(LIBS)

debug: all

lint: lintcheck

pics/%.o: $(TAVORSRCDIR)/%.c
        $(COMPILE.c) -o $@ $<
        $(POST_PROCESS_O)

include $(SRC)/lib/Makefile.targ
```