



Perl 5.6.1 Build Instruction - Tru64 Unix on DEC Alpha

TIVOLI® NETCOOL® PERFORMANCE MANAGER FOR WIRELESS
TIVOLI® NETCOOL® GATEWAY FRAMEWORK

Note: Before using this information and the product it supports, read the information in Notices on page 27.

This edition applies to Version 4.1 of IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

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1 About this Documentation

The Tivoli Netcool Gateway Framework requires Perl 5.6.1. This provides the instruction on how to build Perl 5.6.1 for Tru64 Unix on DEC Alpha architecture machine.

1.1 Audience

The target audience of this document is IBM Tivoli Netcool Performance Manager for Wireless customers. They should be familiar with Perl and IT principles and should also have a good understanding of Tru64 Unix.

Note: Performance Manager for Wireless Administrators should not, without prior consultation and agreement from IBM, make any changes to the Index Organized tables or database schema. Changes to the Index Organized tables or database schema may result in corruption of data and failure of the Performance Manager for Wireless System. This applies to all releases of Performance Manager for Wireless using all versions of interfaces.

1.2 Required Skills and Knowledge

This guide assumes you are familiar with the following:

- General IT Principles
- Tru64 Unix Operating System
- C Compiler
- Perl Scripting
- Windows operating systems
- Graphical User Interfaces

This guide also assumes that you are familiar with your company's network and with procedures for configuring, monitoring, and solving problems on your network.

2 Requirements

2.1 System Requirement

The operating system and processor architecture required is listed in the table below.

Vendor	O/S Version	Architecture
HP (Compaq)	Tru64 Unix version 5	DEC Alpha

2.2 Software Requirement

The Tru64 bundled C Compiler V6.5-011.

Additional Software Components required are:

1. tar
2. gunzip
3. make

3 Preparation

Download Perl 5.6.1 source code from <http://www.perl.com/CPAN/src>

Extract the content of the source package using the following command:

```
$ gunzip -dc perl-5.6.1.tar.gz | tar xvf -
```

The directory `perl-5.6.1` will be created with its contents.

Ensure that `make` and `cc` is in the `$PATH` environment.

Remove the `config.sh` and `Policy.sh` from within the `perl-5.6.1` directory if available:

```
$ cd perl-5.6.1  
$ rm -f config.sh Policy.sh
```

Create the installation directories at a desired location, e.g.:

```
$ mkdir -p /usr/local/gways/perl5/5.6.1/bin
```

4 Build Instruction

Run Configure within the Perl source directory with the following parameters:

1. set the prefix to use the installation directory created earlier,
2. do not install perl as /usr/bin/perl,
3. do not load DB_File extension, and
4. accept all other default parameters.

```
$ sh Configure -Dprefix=/usr/local/gways/perl5/5.6.1 \  
-Uinstallusrbinperl -Ui_db -des
```

A sample of the config.sh produced is in **Appendix A**.

Run make to build the binaries.

```
$ make
```

The binaries are verified using the following command:

```
$ make test
```

The last two lines of the output should show something similar to the following:

```
All tests successful.  
u=0.3 s=0.65 cu=36.55 cs=11.5833 scripts=251 tests=11249
```

Finally, install perl into the target installation directory:

```
$ make install
```

Check the perl configuration summary by running the following command:

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```
$ /usr/local/gways/perl5/5.6.1/bin/perl -V
```

A sample of the perl configuration summary is in **Appendix B**.

Appendix A Sample config.sh

```
#!/bin/sh
#
# This file was produced by running the Configure script. It holds all the
# definitions figured out by Configure. Should you modify one of these values,
# do not forget to propagate your changes by running "Configure -der". You may
# instead choose to run each of the .SH files by yourself, or "Configure -S".
#
# Package name      : perl5
# Source directory  : .
# Configuration time:
# Configured by     : root
# Target system     :
#
Author=''
Date='$Date'
Header=''
Id='$Id'
Locker=''
Log='$Log'
Mcc='Mcc'
RCSfile='$RCSfile'
Revision='$Revision'
Source=''
State=''
_a='.a'
_exe=''
_o='.o'
afs='false'
alignbytes='8'
ansi2knr=''
aphostname='/usr/bin/hostname'
api_revision='5'
api_subversion='0'
api_version='5'
api_versionstring='5.005'
ar='ar'
archlib='/usr/local/gways/perl5/5.6.1/lib/5.6.1/alpha-dec_osf'
archlibexp='/usr/local/gways/perl5/5.6.1/lib/5.6.1/alpha-dec_osf'
archname64=''
archname='alpha-dec_osf'
archobjs=''
awk='awk'
baserev='5.0'
bash=''
```

```

bin='/usr/local/gways/perl5/5.6.1/bin'
bincompat5005='define'
binexp='/usr/local/gways/perl5/5.6.1/bin'
bison='bison'
byacc='byacc'
byteorder='12345678'
c='\c'
castflags='0'
cat='cat'
cc='cc'
cccdlflags=' '
ccdlflags=' -Wl,-rpath,/usr/local/gways/perl5/5.6.1/lib/5.6.1/alpha-
dec_osf/CORE'
ccflags='-std -fprm d -ieee -D_INTRINSICS -I/usr/local/include -DLANGUAGE_C'
ccflags_uselargefiles=''
ccname='cc'
ccsymbols='_LONGLONG=1 _SYSTYPE_BSD=1 __Alpha_AXP=1 __DATE__="May __DECC=1
__DECC_MODE_RELAXED=1 __DECC_VER=60590011 __IEEE_FLOAT=1 __INITIAL_POINTER_SIZE=0
__PRAGMA_ENVIRONMENT=1 __STDC_HOSTED__=1 __STDC_VERSION__=199901L __STDC__=0
__TIME__="16:21:17" __X_FLOAT=1 __arch64__=1 __digital__=1'
ccversion='V6.5-011'
cf_by='root'
cf_email='root@unknown.(none)'
cf_time='Thu May 22 16:20:25 GMT 2008'
charsize='1'
chgrp=''
chmod=''
chown=''
clocktype='clock_t'
comm='comm'
compress=''
contains='grep'
cp='cp'
cpio=''
cpp='cpp'
cpp_stuff='42'
cppccsymbols='_ALPHA=1 __LANGUAGE_C__=1 __alpha=1 __osf__=1 __unix__=1'
cppflags='-std -fprm d -ieee -D_INTRINSICS -I/usr/local/include -DLANGUAGE_C'
cpplast='- '
cppminus='- '
cpprun='cc -E'
cppstdin='cc -E'
cppsymbols='_AES_SOURCE=1 _ANSI_C_SOURCE=1 _INTRINSICS=1 LANGUAGE_C=1 _LONGLONG=1
_OSF_SOURCE=1 _POSIX_C_SOURCE=199506 _POSIX_SOURCE=1 __STDC__=1 _SYSTYPE_BSD=1
_XOPEN_SOURCE=400'
crosscompile='undef'
cryptlib=''
csh='csh'
d_Gconvert='gcvt((x),(n),(b))'
d_PRIEuldbl='define'
d_PRIFuldbl='define'
d_PRIGuldbl='define'

```

```
d_PRIXU64='define'
d_PRIId64='define'
d_PRIIdlbl='define'
d_PRIfllbl='define'
d_PRIgllbl='define'
d_PRIi64='define'
d_PRIO64='define'
d_PRIu64='define'
d_PRIx64='define'
d_SCNfllbl='define'
d__fwalk='undef'
d_access='define'
d_accessx='undef'
d_alarm='define'
d_archlib='define'
d_atolf='undef'
d_atoll='undef'
d_attribut='undef'
d_bcmp='define'
d_bcopy='define'
d_bincompat5005='define'
d_bsd='undef'
d_bsdgetpgrp='undef'
d_bsdsetpgrp='define'
d_bzero='define'
d_casti32='undef'
d_castneg='define'
d_charvspr='undef'
d_chown='define'
d_chroot='define'
d_chsize='undef'
d_closedir='define'
d_const='define'
d_crypt='define'
d_csh='define'
d_cuserid='define'
d_dbl_dig='define'
d_difftime='define'
d_dirnamlen='define'
d_dLError='define'
d_dlopen='define'
d_dlsymun='undef'
d_dosuid='undef'
d_drand48proto='define'
d_dup2='define'
d_eaccess='undef'
d_endgrent='define'
d_endhent='define'
d_endnrent='define'
d_endpent='define'
d_endpwent='define'
d_endsent='define'
```

```
d_eofnblk='define'
d_eunice='undef'
d_fchmod='define'
d_fchown='define'
d_fcntl='define'
d_fcntl_can_lock='define'
d_fd_macros='define'
d_fd_set='define'
d_fds_bits='define'
d_fgetpos='define'
d_flexfnam='define'
d_flock='define'
d_fork='define'
d_fpathconf='define'
d_fpos64_t='undef'
d_frexp='define'
d_fs_data_s='undef'
d_fseeko='define'
d_fsetpos='define'
d_fstatfs='define'
d_fstatvfs='define'
d_fsync='define'
d_ftello='define'
d_ftime='undef'
d_getcwd='define'
d_getespwnam='undef'
d_getfsstat='define'
d_getgrent='define'
d_getgrps='define'
d_gethbyaddr='define'
d_gethbyname='define'
d_gethent='define'
d_gethname='define'
d_gethostprotos='define'
d_getlogin='define'
d_getmnt='undef'
d_getmntent='undef'
d_getnbyaddr='define'
d_getnbyname='define'
d_getnent='define'
d_getnetprotos='define'
d_getpagesz='define'
d_getpbyname='define'
d_getpbynumber='define'
d_getpent='define'
d_getpgid='define'
d_getpgrp2='undef'
d_getpgrp='define'
d_getppid='define'
d_getprior='define'
d_getproto protos='define'
d_getprpwnam='undef'
```

```
d_getpwent='define'
d_getsbyname='define'
d_getsbyport='define'
d_getsent='define'
d_getservprotos='define'
d_getspnam='undef'
d_gettimeod='define'
d_gnulibc='undef'
d_grpasswd='define'
d_hasmntopt='undef'
d_htonl='define'
d_iconv='define'
d_index='undef'
d_inetaton='define'
d_int64_t='define'
d_isascii='define'
d_isnan='define'
d_isnanl='define'
d_killpg='define'
d_lchown='define'
d_ldbl_dig='define'
d_link='define'
d_loconv='define'
d_lockf='define'
d_longdbl='define'
d_longlong='define'
d_lseekproto='define'
d_lstat='define'
d_madvise='define'
d_mblen='define'
d_mbstowcs='define'
d_mbtowc='define'
d_memchr='define'
d_memcmp='define'
d_memcpy='define'
d_memmove='define'
d_memset='define'
d_mkdir='define'
d_mkdtemp='define'
d_mkfifo='define'
d_mkstemp='define'
d_mkstemps='define'
d_mktime='define'
d_mmap='define'
d_modfl='define'
d_mprotect='define'
d_msg='define'
d_msg_ctrunc='define'
d_msg_dontroute='define'
d_msg_oob='define'
d_msg_peek='define'
d_msg_proxy='undef'
```

```
d_msgctl='define'
d_msgget='define'
d_msgrcv='define'
d_msgsnd='define'
d_msync='define'
d_munmap='define'
d_mymalloc='define'
d_nice='define'
d_nv_preserves_uv='undef'
d_nv_preserves_uv_bits='53'
d_off64_t='undef'
d_old_pthread_create_joinable='undef'
d_oldpthreads='undef'
d_oldsock='undef'
d_open3='define'
d_pathconf='define'
d_pause='define'
d_perl_otherlibdirs='undef'
d_phostname='undef'
d_pipe='define'
d_poll='define'
d_portable='define'
d_pthread_yield='undef'
d_pwage='undef'
d_pwchange='undef'
d_pwclass='undef'
d_pwcomment='define'
d_pwexpire='undef'
d_pwgecos='define'
d_pwpasswd='define'
d_pwquota='define'
d_qgcvt='undef'
d_quad='define'
d_readdir='define'
d_readlink='define'
d_rename='define'
d_rewinddir='define'
d_rmdir='define'
d_safebcpy='define'
d_safemcpy='define'
d_sanemcmp='define'
d_sbrkproto='define'
d_sched_yield='undef'
d_scm_rights='define'
d_seekdir='define'
d_select='define'
d_sem='define'
d_semctl='define'
d_semctl_semids='define'
d_semctl_semuns='define'
d_semget='define'
d_semop='define'
```

```
d_setegid='define'
d_seteuid='define'
d_setgrent='define'
d_setgrps='define'
d_sethent='define'
d_setlinebuf='define'
d_setlocale='define'
d_setnrent='define'
d_setpent='define'
d_setpgid='define'
d_setpgrp2='undef'
d_setpgrp='define'
d_setprior='define'
d_setproctitle='undef'
d_setpwent='define'
d_setregid='define'
d_setresgid='undef'
d_setresuid='undef'
d_setreuid='define'
d_setrgid='define'
d_setruid='define'
d_setsent='define'
d_setsid='define'
d_setvbuf='define'
d_sfio='undef'
d_shm='define'
d_shmat='define'
d_shmatprototype='define'
d_shmctl='define'
d_shmdt='define'
d_shmget='define'
d_sigaction='define'
d_sigsetjmp='define'
d_socket='define'
d_socklen_t='undef'
d_sockpair='define'
d_socks5_init='undef'
d_sqrtl='define'
d_statblks='define'
d_statfs_f_flags='define'
d_statfs_s='define'
d_statvfs='define'
d_stdio_cnt_lval='define'
d_stdio_ptr_lval='define'
d_stdio_ptr_lval_nochange_cnt='define'
d_stdio_ptr_lval_sets_cnt='undef'
d_stdio_stream_array='define'
d_stdio_base='define'
d_stdstdio='define'
d_strchr='define'
d_strcoll='define'
d_strncpy='define'
```

```
d_strerrorm='strerror(e) '
d_strerror='define'
d_strtod='define'
d_strtol='define'
d_strtold='define'
d_strtoll='undef'
d_strtoul='define'
d_strtoull='undef'
d_strtouq='undef'
d_strxfrm='define'
d_suidsafes='undef'
d_symlink='define'
d_syscall='define'
d_sysconf='define'
d_sysernlst=''
d_syserrlst='define'
d_system='define'
d_tcgetpgrp='define'
d_tcsetpgrp='define'
d_telldir='define'
d_telldirproto='define'
d_time='define'
d_times='define'
d_truncate='define'
d_tzname='define'
d_umask='define'
d_uname='define'
d_union_semun='undef'
d_ustat='define'
d_vendorarch='undef'
d_vendorbin='undef'
d_vendorlib='undef'
d_vfork='undef'
d_void_closedir='undef'
d_voidsig='define'
d_voidtty=''
d_volatile='define'
d_vprintf='define'
d_wait4='define'
d_waitpid='define'
d_wcstombs='define'
d_wctomb='define'
d_xenix='undef'
date='date'
db_hashtype='u_int32_t'
db_prefixtype='size_t'
defvoidused='15'
direntrytype='struct dirent'
dlex='so'
dlsrc='dl_dlopen.xs'
doublesize='8'
drand01='drand48()'
```

```
dynamic_ext='B ByteLoader Data/Dumper Devel/DProf Devel/Peek Fcntl File/Glob IO
IPC/SysV NDBM_File ODBM_File Opcode POSIX SDBM_File Socket Sys/Hostname
Sys/Syslog attrs re'
eagain='EAGAIN'
ebcdic='undef'
echo='echo'
egrep='egrep'
emacs=''
eunicefix=':'
exe_ext=''
expr='expr'
extensions='B ByteLoader Data/Dumper Devel/DProf Devel/Peek Fcntl File/Glob IO
IPC/SysV NDBM_File ODBM_File Opcode POSIX SDBM_File Socket Sys/Hostname
Sys/Syslog attrs re Errno'
fflushNULL='define'
fflushall='undef'
find=''
firstmakefile='makefile'
flex=''
fpossize='8'
fpostype='fpos_t'
freetype='void'
full_ar='/usr/bin/ar'
full_csh='/usr/bin/csh'
full_sed='/usr/bin/sed'
gccosandvers=''
gccversion=''
gidformat='"u"'
gidsign='1'
gidsize='4'
gidtype='gid_t'
glibpth='/usr/shlib /usr/ccs/lib /usr/lib/cmplrs/cc /usr/lib /usr/local/lib
/var/shlib'
grep='grep'
groupcat='cat /etc/group'
groupstype='gid_t'
gzip='gzip'
h_fcntl='false'
h_sysfile='true'
hint='recommended'
hostcat='ypcat hosts'
i16size='2'
i16type='short'
i32size='4'
i32type='int'
i64size='8'
i64type='long'
i8size='1'
i8type='char'
i_arpainet='define'
i_bsdiocntl=''
i_db='undef'
```

```
i_dbm='define'
i_dirent='define'
i_dld='undef'
i_dlfcn='define'
i_fcntl='undef'
i_float='define'
i_gdbm='undef'
i_grp='define'
i_iconv='define'
i_ieeeep='undef'
i_inttypes='define'
i_libutil='undef'
i_limits='define'
i_locale='define'
i_machcthr='undef'
i_malloc='define'
i_math='define'
i_memory='undef'
i_mntent='undef'
i_ndbm='define'
i_netdb='define'
i_neterano='undef'
i_netinettcp='define'
i_niin='define'
i_poll='define'
i_prot='define'
i_pthread='define'
i_pwd='define'
i_rpcsvcdbm='undef'
i_sfio='undef'
i_sgtty='undef'
i_shadow='undef'
i_socks='undef'
i_stdarg='define'
i_stddef='define'
i_stdlib='define'
i_string='define'
i_sunmath='undef'
i_sysaccess='define'
i_sysdir='define'
i_sysfile='define'
i_sysfilio='undef'
i_sysin='undef'
i_sysioctl='define'
i_syslog='define'
i_sysmman='define'
i_sysmode='define'
i_sysmount='define'
i_sysndir='undef'
i_sysparam='define'
i_sysresrc='define'
i_sysseprt='define'
```

```
i_sysselect='define'
i_syssockio=''
i_sysstat='define'
i_sysstatfs='undef'
i_sysstatvfs='define'
i_systime='define'
i_systimek='undef'
i_systimes='define'
i_systypes='define'
i_sysuio='define'
i_sysun='define'
i_sysutsname='define'
i_sysvfs='undef'
i_syswait='define'
i_termio='undef'
i_termios='define'
i_time='undef'
i_unistd='define'
i_ustat='define'
i_utime='define'
i_values='define'
i_varargs='undef'
i_varhdr='stdarg.h'
i_vfork='undef'
ignore_versioned_solibs=''
inc_version_list=' '
inc_version_list_init='0'
incpath=''
inews=''
installarchlib='/usr/local/gways/perl5/5.6.1/lib/5.6.1/alpha-dec_osf'
installbin='/usr/local/gways/perl5/5.6.1/bin'
installman1dir='/usr/local/gways/perl5/5.6.1/man/man1'
installman3dir='/usr/local/gways/perl5/5.6.1/man/man3'
installprefix='/usr/local/gways/perl5/5.6.1'
installprefixexp='/usr/local/gways/perl5/5.6.1'
installprivlib='/usr/local/gways/perl5/5.6.1/lib/5.6.1'
installscript='/usr/local/gways/perl5/5.6.1/bin'
installsitearch='/usr/local/gways/perl5/5.6.1/lib/site_perl/5.6.1/alpha-dec_osf'
installsitebin='/usr/local/gways/perl5/5.6.1/bin'
installsitelib='/usr/local/gways/perl5/5.6.1/lib/site_perl/5.6.1'
installstyle='lib'
installusrbinperl='undef'
installvendorarch=''
installvendorbin=''
installvendorlib=''
intsize='4'
issymlink='test -h'
ivdformat='"ld"'
ivsize='8'
ivtype='long'
```

```
known_extensions='B ByteLoader DB_File Data/Dumper Devel/DProf Devel/Peek Fcntl
File/Glob GDBM_File IO IPC/SysV NDBM_File ODBM_File Opcode POSIX SDBM_File Socket
Sys/Hostname Sys/Syslog Thread attrs re'
ksh=''
ld='ld'
lddflags='-shared -expect_unresolved "*" -O4 -msym -std -s -L/usr/local/lib'
ldflags='-L/usr/local/lib'
ldflags_uselargefiles=''
ldlibpthname='LD_LIBRARY_PATH'
less='less'
lib_ext='.a'
libc='/usr/shlib/libc.so'
libperl='libperl.so'
libpth='/usr/local/lib /usr/shlib /usr/ccs/lib /usr/lib/cmplrs/cc /usr/lib
/var/shlib'
libs='-ldbm -ldb -lm -liconv -lutil'
libsdirs=' /usr/ccs/lib /usr/shlib'
libsfiles=' libdbm.a libdb.so libm.so libiconv.so libutil.a'
libsfound=' /usr/ccs/lib/libdbm.a /usr/shlib/libdb.so /usr/shlib/libm.so
/usr/shlib/libiconv.so /usr/ccs/lib/libutil.a'
libspath=' /usr/local/lib /usr/shlib /usr/ccs/lib /usr/lib/cmplrs/cc /usr/lib
/var/shlib'
libswanted='sfio socket bind inet nsl nm gdbm dbm db malloc dld ld sun m cposix
posix ndir dir crypt sec ucb BSD x iconv util'
libswanted_uselargefiles=''
line=''
lint=''
lkflags=''
ln='ln'
lns='/usr/bin/ln -s'
locincpth='/usr/local/include /opt/local/include /usr/gnu/include
/opt/gnu/include /usr/GNU/include /opt/GNU/include'
loclibpth='/usr/local/lib /opt/local/lib /usr/gnu/lib /opt/gnu/lib /usr/GNU/lib
/opt/GNU/lib'
longdblsize='16'
longlongsize='8'
longsize='8'
lp=''
lpr=''
ls='ls'
lseeksize='8'
lseektype='off_t'
mail=''
mailx=''
make='make'
make_set_make='#'
mallocobj='malloc.o'
malloccsrc='malloc.c'
malloctype='void *'
manldir='/usr/local/gways/perl5/5.6.1/man/man1'
mandirexp='/usr/local/gways/perl5/5.6.1/man/man1'
manlex='1'
```

```
man3dir='/usr/local/gways/perl5/5.6.1/man/man3'
man3direxp='/usr/local/gways/perl5/5.6.1/man/man3'
man3ext='3'
mips_type=''
mkdir='mkdir'
mmatype='void *'
modetype='mode_t'
more='more'
multiarch='undef'
mv=''
myarchname='alpha-dec_osf'
mydomain='.my.ibm.com'
myhostname='unknown'
myuname=''
n=''
netdb_hlen_type='int'
netdb_host_type='const char *'
netdb_name_type='const char *'
netdb_net_type='int'
nm='nm'
nm_opt='-p'
nm_so_opt=''
nonxs_ext='Errno'
nroff='nroff'
nvEUformat='"E"'
nvFUformat='"F"'
nvGUformat='"G"'
nveformat='"e"'
nvfformat='"f"'
nvgformat='"g"'
nvsize='8'
nvtype='double'
o_nonblock='O_NONBLOCK'
obj_ext='.o'
old_pthread_create_joinable=''
optimize='-O4'
orderlib='false'
osname='dec_osf'
osvers='5.1'
otherlibdirs=''
package='perl5'
pager='/usr/local/bin/less'
passcat='cat /etc/passwd'
patchlevel='6'
path_sep=':'
perl5='/usr/local/bin/perl'
perl=''
perladmin='root@toman.kl.apac.vallent.com'
perllibs='-lm -liconv -lutil'
perlpath='/usr/local/gways/perl5/5.6.1/bin/perl'
pg='pg'
phostname='hostname'
```

```
pidtype='pid_t'
plibpth=''
pm_apiversion='5.005'
pmake=''
pr=''
prefix='/usr/local/gways/perl5/5.6.1'
prefixexp='/usr/local/gways/perl5/5.6.1'
privlib='/usr/local/gways/perl5/5.6.1/lib/5.6.1'
privlibexp='/usr/local/gways/perl5/5.6.1/lib/5.6.1'
prototype='define'
ptrsize='8'
quadkind='2'
quadtype='long'
randbits='48'
randfunc='drand48'
randseedtype='long'
ranlib=':'
rd_nodata='-1'
revision='5'
rm='rm'
rmail=''
runnm='true'
sPRIEUldbl='"LE"'
sPRIFUldbl='"LF"'
sPRIGUldbl='"LG"'
sPRIXU64='"lX"'
sPRId64='"ld"'
sPRIeldbl='"Le"'
sPRIfldbl='"Lf"'
sPRIgldbl='"Lg"'
sPRIi64='"li"'
sPRIo64='"lo"'
sPRIu64='"lu"'
sPRIx64='"lx"'
sSCNfldbl='"Lf"'
sched_yield='undef'
scriptdir='/usr/local/gways/perl5/5.6.1/bin'
scriptdirexp='/usr/local/gways/perl5/5.6.1/bin'
sed='sed'
seedfunc='srand48'
selectminbits='32'
selecttype='fd_set *'
sendmail=''
sh='/bin/sh'
shar=''
sharpbang='#!'
shmattype='void *'
shortsize='2'
shrpenv=''
shsharp='true'
sig_count='49'
```

```

sig_name='ZERO HUP INT QUIT ILL TRAP ABRT EMT FPE KILL BUS SEGV SYS PIPE ALRM
TERM IOINT STOP TSTP CONT CHLD TTIN TTOU AIO XCPU XFSZ VTALRM PROF WINCH INFO
USR1 USR2 RESV RTMIN NUM34 NUM35 NUM36 NUM37 NUM38 NUM39 NUM40 NUM41 NUM42 NUM43
NUM44 NUM45 NUM46 NUM47 MAX IOT LOST URG CLD IO POLL PTY PWR RTMAX '
sig_name_init='"ZERO", "HUP", "INT", "QUIT", "ILL", "TRAP", "ABRT", "EMT", "FPE",
"KILL", "BUS", "SEGV", "SYS", "PIPE", "ALRM", "TERM", "IOINT", "STOP", "TSTP",
"CONT", "CHLD", "TTIN", "TTOU", "AIO", "XCPU", "XFSZ", "VTALRM", "PROF", "WINCH",
"INFO", "USR1", "USR2", "RESV", "RTMIN", "NUM34", "NUM35", "NUM36", "NUM37",
"NUM38", "NUM39", "NUM40", "NUM41", "NUM42", "NUM43", "NUM44", "NUM45", "NUM46",
"NUM47", "MAX", "IOT", "LOST", "URG", "CLD", "IO", "POLL", "PTY", "PWR", "RTMAX",
0'
sig_num='0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 6 6 16 20 23 23
23 29 48 '
sig_num_init='0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18,
19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38,
39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 6, 6, 16, 20, 23, 23, 23, 29, 48, 0'
signal_t='void'
sitearch='/usr/local/gways/perl5/5.6.1/lib/site_perl/5.6.1/alpha-dec_osf'
sitearchexp='/usr/local/gways/perl5/5.6.1/lib/site_perl/5.6.1/alpha-dec_osf'
sitebin='/usr/local/gways/perl5/5.6.1/bin'
sitebinexp='/usr/local/gways/perl5/5.6.1/bin'
sitelib='/usr/local/gways/perl5/5.6.1/lib/site_perl/5.6.1'
sitelib_stem='/usr/local/gways/perl5/5.6.1/lib/site_perl'
sitelibexp='/usr/local/gways/perl5/5.6.1/lib/site_perl/5.6.1'
siteprefix='/usr/local/gways/perl5/5.6.1'
siteprefixexp='/usr/local/gways/perl5/5.6.1'
size='8'
sizetype='size_t'
sleep=''
smail=''
so='so'
sockethdr=''
socketlib=''
socksizetype='int'
sort='sort'
spackage='Perl5'
spitshell='cat'
src='.'
ssizetype='ssize_t'
startperl='#!/usr/local/gways/perl5/5.6.1/bin/perl'
startsh='#!/bin/sh'
static_ext=''
stdchar='char'
stdio_base='((fp)->_base)'
stdio_bufsiz='((fp)->_cnt + (fp)->_ptr - (fp)->_base)'
stdio_cnt='((fp)->_cnt)'
stdio_filbuf=''
stdio_ptr='((fp)->_ptr)'
stdio_stream_array='_iob'
strings='/usr/include/string.h'
submit=''

```

```
subversion='1'
sysman='/usr/man/man1'
tail=''
tar=''
tbl=''
tee=''
test='test'
timeincl='/usr/include/sys/time.h '
timetype='time_t'
touch='touch'
tr='tr'
trnl='\n'
troff=''
u16size='2'
u16type='unsigned short'
u32size='4'
u32type='unsigned int'
u64size='8'
u64type='unsigned long'
u8size='1'
u8type='unsigned char'
uidformat='"u"'
uidsign='1'
uidsize='4'
uidtype='uid_t'
uname='uname'
uniq='uniq'
uquadtype='unsigned long'
use5005threads='undef'
use64bitall='define'
use64bitint='define'
usedl='define'
useithreads='undef'
uselargefiles='define'
uselongdouble='undef'
usemorebits='undef'
usemultiplicity='undef'
usemymalloc='y'
usenm='true'
useopcode='true'
useperlio='undef'
useposix='true'
usesfio='false'
ushrplib='true'
usesocks='undef'
sethreads='undef'
usevendorprefix='undef'
usevfork='false'
usrinc='/usr/include'
uname=''
uvXUformat='"lX"'
uvoformat='"lo"'
```

```
uvsize='8'
uvtype='unsigned long'
uvuformat='"lu"'
uvxformat='"lx"'
vendorarch=''
vendorarchexp=''
vendorbin=''
vendorbinexp=''
vendorlib=''
vendorlib_stem=''
vendorlibexp=''
vendorprefix=''
vendorprefixexp=''
version='5.6.1'
versiononly='undef'
vi=''
voidflags='15'
xlibpth='/usr/lib/386 /lib/386'
xs_apiversion='5.005'
yacc='/usr/local/bin/byacc'
yaccflags=''
zcat=''
zip='zip'
# Configure command line arguments.
config_arg0='Configure'
config_args='-Dprefix=/usr/local/gways/perl5/5.6.1 -Uinstallusrbinperl -Ui_db -des'
config_argc=4
config_arg1='-Dprefix=/usr/local/gways/perl5/5.6.1'
config_arg2='-Uinstallusrbinperl'
config_arg3='-Ui_db'
config_arg4='-des'
PERL_REVISION=5
PERL_VERSION=6
PERL_SUBVERSION=1
PERL_API_REVISION=5
PERL_API_VERSION=5
PERL_API_SUBVERSION=0
CONFIGDOTSH=true
# Variables propagated from previous config.sh file.
pp_sys_cflags=''
siteman1=''
siteman3=''
sitescript=''
```

Appendix B Perl Configuration Summary

Summary of my perl5 (revision 5.0 version 6 subversion 1) configuration:

Platform:

```
osname=dec_osf, osvers=5.1, archname=alpha-dec_osf
uname='osf1 unknown v5.1 2650 alpha '
config_args='-Dprefix=/usr/local/gways/perl5/5.6.1 -Uinstallusrbinperl -Ui_db
-des'
hint=recommended, useposix=true, d_sigaction=define
usethreads=undef use5005threads=undef useithreads=undef usemultiplicity=undef
useperlio=undef d_sfio=undef uselargefiles=define usesocks=undef
use64bitint=define use64bitall=define uselongdouble=undef
```

Compiler:

```
cc='cc', ccflags='-std -fprm d -ieee -D_INTRINSICS -I/usr/local/include -
DLANGUAGE_C',
optimize='-O4',
cppflags='-std -fprm d -ieee -D_INTRINSICS -I/usr/local/include -DLANGUAGE_C'
ccversion='V6.5-011', gccversion='', gccosandvers=''
intsize=4, longsize=8, ptrsize=8, doublesize=8, byteorder=12345678
d_longlong=define, longlongsize=8, d_longdbl=define, longdblsize=16
ivtype='long', ivsize=8, nvtype='double', nvsize=8, Off_t='off_t',
lseeksize=8
```

```
alignbytes=8, usemymalloc=y, prototype=define
```

Linker and Libraries:

```
ld='ld', ldflags=' -L/usr/local/lib'
libpth=/usr/local/lib /usr/shlib /usr/ccs/lib /usr/lib/cmplrs/cc /usr/lib
/var/shlib
libs=-ldbm -ldb -lm -liconv -lutil
perllibs=-lm -liconv -lutil
libc=/usr/shlib/libc.so, so=so, useshrplib=true, libperl=libperl.so
```

Dynamic Linking:

```
dlsrc=dl_dlopen.xs, dlex=so, d_dlsymun=undef, ccdlflags=' -Wl,-
rpath,/usr/local/gways/perl5/5.6.1/lib/5.6.1/alpha-dec_osf/CORE'
cccdlflags=' ', lddlflags='-shared -expect_unresolved "*" -O4 -msym -std -s -
L/usr/local/lib'
```

Characteristics of this binary (from libperl):

Compile-time options: USE_64_BIT_INT USE_64_BIT_ALL USE_LARGE_FILES

Built under dec_osf

Compiled at May 22 2008 17:04:28

@INC:

```
/usr/local/gways/perl5/5.6.1/lib/5.6.1/alpha-dec_osf
/usr/local/gways/perl5/5.6.1/lib/5.6.1
/usr/local/gways/perl5/5.6.1/lib/site_perl/5.6.1/alpha-dec_osf
/usr/local/gways/perl5/5.6.1/lib/site_perl/5.6.1
/usr/local/gways/perl5/5.6.1/lib/site_perl
```

Appendix C Notices and Trademarks

This appendix contains the following:

- Notices
- Trademarks

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