



Perl 5.6.1 Build Instruction - Red Hat Enterprise Linux on POWER

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 Red Hat Enterprise Linux on POWER 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 Red Hat Enterprise Linux on POWER.

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
- Red Hat Enterprise Linux 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
Red Hat	Enterprise Linux 4 or 5	POWER

2.2 Software Requirement

The RPM packages required is listed in the table below:

Software	RPM Packages Name	Version
GCC	gcc	3.4.3
GCC libraries	libgcc	3.4.3
GNU Make	make	3.80
GNU binary utilities	binutils	2.15.92.0.2
GNU C development headers and libraries	glibc-devel	2.3.4
GNU C-compatible Compiler Processor	cpp	3.4.3
Berkeley Yacc	byacc	1.9

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**.

After Configure is completed, edit the following makefiles:

1. makefile
2. x2p/makefile

Remove the lines containing the following from the makefiles:

1. <built-in>
2. <command line>

The command to remove the lines is as follows:

```
$ mv makefile makefile.1  
$ cat makefile.1 | sed '/: </d' > makefile
```

Repeat the above commands for x2p/makefile.

```
$ cd x2p  
$ mv makefile makefile.1  
$ cat makefile.1 | sed '/: </d' > makefile  
$ cd ..
```

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=0.11  s=0.07  cu=10.46  cs=2.48  scripts=252  tests=12605
```

Finally, install perl into the target installation directory:

```
$ make install
```

Check the perl configuration summary by running the following command:

```
$ /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='/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/ppc64-linux'
archlibexp='/usr/local/gways/perl5/5.6.1/lib/5.6.1/ppc64-linux'
archname64=' '
archname='ppc64-linux'
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='4321'
c=''
castflags='0'
cat='cat'
cc='cc'
cccdlflags='-fpic'
ccdlflags='-rdynamic'
ccflags='-fno-strict-aliasing -I/usr/local/include -D_LARGEFILE_SOURCE -
D_FILE_OFFSET_BITS=64'
ccflags_uselargefiles='-D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64'
ccname='gcc'
ccsymbols='-Asystem=linux -Asystem=posix -Asystem=unix __gnu_linux__=1'
ccversion=''
cf_by='root'
cf_email='root@unknown.(none)'
cf_time='Wed Mar 19 08:01:07 GMT 2008'
charsize='1'
chgrp=''
chmod=''
chown=''
clocktype='clock_t'
comm='comm'
compress=''
contains='grep'
cp='cp'
cpio=''
cpp='cpp'
cpp_stuff='42'
cppccsymbols='linux=1 __linux=1 __linux__=1 unix=1 __unix=1 __unix__=1'
cppflags='-fno-strict-aliasing -I/usr/local/include'
cpplast='-'
cppminus='-'
cpprun='cc -E'
cppstdin='cc -E'
cppsymbols='_BIG_ENDIAN=1 __BIG_ENDIAN__=1 __ELF__=1 _FILE_OFFSET_BITS=64
__GNUC__=3 __GNUC_MINOR__=4 _LARGEFILE_SOURCE=1 _POSIX_C_SOURCE=199506
_POSIX_SOURCE=1 __STDC__=1'
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_PRIeldbl='define'
```

```
d_PRIfldbl='define'
d_PRIgldbl='define'
d_PRIi64='define'
d_PRIo64='define'
d_PRIu64='define'
d_PRIx64='define'
d_SCNfldbl='define'
d__fwalk='undef'
d_access='define'
d_accessx='undef'
d_alarm='define'
d_archlib='define'
d_atolf='undef'
d_atoll='define'
d_attribut='define'
d_bcmp='define'
d_bcopy='define'
d_bincompat5005='define'
d_bsd='undef'
d_bsdgetpgrp='undef'
d_bsdsetpgrp='undef'
d_bzero='define'
d_casti32='define'
d_castneg='define'
d_charvspr='define'
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='undef'
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='undef'
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='undef'
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_getmnttent='define'
d_getnbyaddr='define'
d_getnbyname='define'
d_getnent='define'
d_getnetprotos='define'
d_getpagsz='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='define'
d_gettimeod='define'
d_gnulibc='define'
d_grpasswd='define'
d_hasmntopt='define'
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_locconv='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='undef'
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='define'
d_msgctl='define'
d_msgget='define'
d_msgrcv='define'
```

```
d_msgsnd='define'
d_msync='define'
d_munmap='define'
d_mymalloc='undef'
d_nice='define'
d_nv_preserves_uv='define'
d_nv_preserves_uv_bits='32'
d_off64_t='undef'
d_old_pthread_create_joinable='undef'
d_old_pthreads='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='define'
d_pwage='undef'
d_pwchange='undef'
d_pwclass='undef'
d_pwcomment='undef'
d_pwexpire='undef'
d_pwgecos='define'
d_pwpasswd='define'
d_pwquota='undef'
d_qgcvt='define'
d_quad='define'
d_readdir='define'
d_readlink='define'
d_rename='define'
d_rewinddir='define'
d_rmdir='define'
d_safebcpy='define'
d_safemcpy='undef'
d_sanemcmp='define'
d_sbrkproto='define'
d_sched_yield='define'
d_scm_rights='define'
d_seekdir='define'
d_select='define'
d_sem='define'
d_semctl='define'
d_semctl_semids='undef'
d_semctl_semuns='define'
d_semget='define'
d_semop='define'
d_setegid='define'
d_seteuid='define'
d_setgrent='define'
```

```
d_setgrps='define'
d_sethrent='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='define'
d_setresuid='define'
d_setreuid='define'
d_setrgid='undef'
d_setruid='undef'
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='define'
d_sockpair='define'
d_socks5_init='undef'
d_sqrtl='define'
d_statblks='define'
d_statfs_f_flags='undef'
d_statfs_s='define'
d_statvfs='define'
d_stdio_cnt_lval='undef'
d_stdio_ptr_lval='define'
d_stdio_ptr_lval_nochange_cnt='undef'
d_stdio_ptr_lval_sets_cnt='define'
d_stdio_stream_array='undef'
d_stdiobase='define'
d_stdstdio='define'
d_strchr='define'
d_strcoll='define'
d_strctcpy='define'
d_strerrorm='strerror(e) '
d_strerror='define'
d_strtod='define'
```

```
d_strtol='define'
d_strtold='define'
d_strtoll='define'
d_strtoul='define'
d_strtoull='define'
d_strtouq='define'
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='attrs B ByteLoader Data/Dumper Devel/DProf Devel/Peek Fcntl
File/Glob GDBM_File IO IPC/SysV Opcode POSIX re SDBM_File Socket Sys/Hostname
Sys/Syslog'
```

```
eagain='EAGAIN'
ebcdic='undef'
echo='echo'
egrep='egrep'
emacs=''
eunicefix=':'
exe_ext=''
expr='expr'
extensions='attrs B ByteLoader Data/Dumper Devel/DProf Devel/Peek Fcntl File/Glob
GDBM_File IO IPC/SysV Opcode POSIX re SDBM_File Socket Sys/Hostname Sys/Syslog
Errno'
fflushNULL='define'
fflushall='undef'
find=''
firstmakefile='makefile'
flex=''
fpossize='16'
fpostype='fpos_t'
freetype='void'
full_ar='/usr/bin/ar'
full_csh='/bin/csh'
full_sed='/bin/sed'
gccosandvers=''
gccversion='3.4.3 20041212 (Red Hat 3.4.3-9.EL4)'
gidformat='"lu"'
gidsign='1'
gidsize='4'
gidtype='gid_t'
glibpth='/usr/shlib /lib /usr/lib /usr/lib/386 /lib/386 /usr/ccs/lib /usr/ucblib
/usr/local/lib '
grep='grep'
groupcat='cat /etc/group'
groupstype='gid_t'
gzip='gzip'
h_fcntl='false'
h_sysfile='true'
hint='recommended'
hostcat='cat /etc/hosts'
i16size='2'
i16type='short'
i32size='4'
i32type='long'
i64size='8'
i64type='long long'
i8size='1'
i8type='char'
i_arpainet='define'
i_bsdiioctl=''
i_db='undef'
i_dbm='undef'
i_dirent='define'
i_dld='undef'
```

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```
i_dlfcn='define'  
i_fcntl='undef'  
i_float='define'  
i_gdbm='define'  
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='define'  
i_ndbm='undef'  
i_netdb='define'  
i_neterro='undef'  
i_netinettcp='define'  
i_niin='define'  
i_poll='define'  
i_prot='undef'  
i_pthread='define'  
i_pwd='define'  
i_rpcsvcdbm='undef'  
i_sfio='undef'  
i_sgtty='undef'  
i_shadow='define'  
i_socks='undef'  
i_stdarg='define'  
i_stddef='define'  
i_stdlib='define'  
i_string='define'  
i_sunmath='undef'  
i_sysaccess='undef'  
i_sysdir='define'  
i_sysfile='define'  
i_sysfilio='undef'  
i_sysin='undef'  
i_sysioctl='define'  
i_syslog='define'  
i_sysmman='define'  
i_sysmode='undef'  
i_sysmount='define'  
i_sysndir='undef'  
i_sysparam='define'  
i_sysresrc='define'  
i_sysseclt='undef'  
i_sysseclt='define'  
i_syssockio=''  
i_sysstat='define'
```

```
i_sysstatfs='define'
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='define'
i_syswait='define'
i_termio='undef'
i_termios='define'
i_time='define'
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='y'
inc_version_list=' '
inc_version_list_init='0'
incpath=''
inews=''
installarchlib='/usr/local/gways/perl5/5.6.1/lib/5.6.1/ppc64-linux'
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/ppc64-linux'
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='4'
ivtype='long'
known_extensions='attrs B ByteLoader Data/Dumper DB_File Devel/DProf Devel/Peek
Fcntl File/Glob GDBM_File IO IPC/SysV NDBM_File ODBM_File Opcode POSIX re
SDBM_File Socket Sys/Hostname Sys/Syslog Thread'
ksh=''
ld='cc'
```

```
lddflags='-shared -L/usr/local/lib'
ldflags=' -L/usr/local/lib'
ldflags_uselargefiles=''
ldlibpthname='LD_LIBRARY_PATH'
less='less'
lib_ext='.a'
libc='/lib/libc-2.3.4.so'
libperl='libperl.a'
libpth='/usr/local/lib /lib /usr/lib'
libs='-lnsl -lgdbm -ldb -ldl -lm -lc -lcrypt -lutil'
libdirs=' /usr/lib'
libsfiles=' libnsl.so libgdbm.so libdb.so libdl.so libm.so libc.so libcrypt.so
libutil.so'
libsfound=' /usr/lib/libnsl.so /usr/lib/libgdbm.so /usr/lib/libdb.so
/usr/lib/libdl.so /usr/lib/libm.so /usr/lib/libc.so /usr/lib/libcrypt.so
/usr/lib/libutil.so'
libspath=' /usr/local/lib /lib /usr/lib'
libswanted='sfio socket bind inet nsl nm ndbm gdbm dbm db malloc dl dld ld sun m
c cposix posix ndir dir crypt sec ucb BSD PW x iconv util'
libswanted_uselargefiles=''
line=''
lint=''
lkflags=''
ln='ln'
lns='/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='8'
longlongsize='8'
longsize='4'
lp=''
lpr=''
ls='ls'
lseeksize='8'
lseektype='off_t'
mail=''
mailx=''
make='make'
make_set_make='#'
mallocobj=''
malloccsrc=''
malloctype='void *'
man1dir='/usr/local/gways/perl5/5.6.1/man/man1'
man1direxp='/usr/local/gways/perl5/5.6.1/man/man1'
man1ext='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='ppc64-linux'
mydomain='.(none)'
myhostname='unknown'
myuname='linux unknown 2.6.9-5.el #1 smp wed jan 5 19:23:58 est 2005 ppc64 ppc64
ppc64 gnulinux '
n='-n'
netdb_hlen_type='size_t'
netdb_host_type='const void *'
netdb_name_type='const char *'
netdb_net_type='in_addr_t'
nm='nm'
nm_opt=''
nm_so_opt='--dynamic'
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='-O2'
orderlib='false'
osname='linux'
osvers='2.6.9-5.el'
otherlibdirs=''
package='perl5'
pager='/usr/bin/less'
passcat='cat /etc/passwd'
patchlevel='6'
path_sep=':'
perl5='/usr/bin/perl'
perl=''
perladmin='root@unknown.(none)'
perllibs='-lnsl -ldl -lm -lc -lcrypt -lutil'
perlpath='/usr/local/gways/perl5/5.6.1/bin/perl'
pg='pg'
phostname='hostname'
pidtype='pid_t'
plibpth=''
pm_apiversion='5.005'
pmake=''
```

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```
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='4'
quadkind='3'
quadtype='long long'
randbits='48'
randfunc='drand48'
randseedtype='long'
ranlib=':'
rd_nodata='-1'
revision='5'
rm='rm'
rmail=''
runnm='false'
sPRIEUldbl='"E"'
sPRIFUldbl='"F"'
sPRIGUldbl='"G"'
sPRIXU64='"l1X"'
sPRId64='"l1d"'
sPRIeldbl='"e"'
sPRIfldbl='"f"'
sPRIgldbl='"g"'
sPRIi64='"l1i"'
sPRIo64='"l1o"'
sPRIu64='"l1u"'
sPRIx64='"l1x"'
sSCNfldbl='"f"'
sched_yield='sched_yield()'
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='65'
sig_name='ZERO HUP INT QUIT ILL TRAP ABRT BUS FPE KILL USR1 SEGV USR2 PIPE ALRM
TERM STKFLT CHLD CONT STOP TSTP TTIN TTOU URG XCPU XFSZ VTALRM PROF WINCH IO PWR
SYS NUM32 NUM33 RTMIN NUM35 NUM36 NUM37 NUM38 NUM39 NUM40 NUM41 NUM42 NUM43 NUM44
NUM45 NUM46 NUM47 NUM48 NUM49 NUM50 NUM51 NUM52 NUM53 NUM54 NUM55 NUM56 NUM57
NUM58 NUM59 NUM60 NUM61 NUM62 NUM63 RTMAX IOT CLD POLL UNUSED '
```

```

sig_name_init="ZERO", "HUP", "INT", "QUIT", "ILL", "TRAP", "ABRT", "BUS", "FPE",
"KILL", "USR1", "SEGV", "USR2", "PIPE", "ALRM", "TERM", "STKFLT", "CHLD", "CONT",
"STOP", "TSTP", "TTIN", "TTOU", "URG", "XCPU", "XFSZ", "VTALRM", "PROF", "WINCH",
"IO", "PWR", "SYS", "NUM32", "NUM33", "RTMIN", "NUM35", "NUM36", "NUM37",
"NUM38", "NUM39", "NUM40", "NUM41", "NUM42", "NUM43", "NUM44", "NUM45", "NUM46",
"NUM47", "NUM48", "NUM49", "NUM50", "NUM51", "NUM52", "NUM53", "NUM54", "NUM55",
"NUM56", "NUM57", "NUM58", "NUM59", "NUM60", "NUM61", "NUM62", "NUM63", "RTMAX",
"IOT", "CLD", "POLL", "UNUSED", 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 49 50 51 52 53
54 55 56 57 58 59 60 61 62 63 64 6 17 29 31 '
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, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58,
59, 60, 61, 62, 63, 64, 6, 17, 29, 31, 0'
signal_t='void'
sitearch='/usr/local/gways/perl5/5.6.1/lib/site_perl/5.6.1/ppc64-linux'
sitearchexp='/usr/local/gways/perl5/5.6.1/lib/site_perl/5.6.1/ppc64-linux'
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='4'
sizetype='size_t'
sleep=''
smail=''
so='so'
sockethdr=''
socketlib=''
socksizetype='socklen_t'
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)->_IO_read_base)'
stdio_bufsiz='((fp)->_IO_read_end - (fp)->_IO_read_base)'
stdio_cnt='((fp)->_IO_read_end - (fp)->_IO_read_ptr)'
stdio_filbuf=''
stdio_ptr='((fp)->_IO_read_ptr)'
stdio_stream_array=''
strings='/usr/include/string.h'
submit=''
subversion='1'
sysman='/usr/share/man/man1'

```

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

Appendix B Perl Configuration Summary

```

Summary of my perl5 (revision 5.0 version 6 subversion 1) configuration:
Platform:
  osname=linux, osvers=2.6.9-5.el, archname=ppc64-linux
  uname='linux unknown 2.6.9-5.el #1 smp wed jan 5 19:23:58 est 2005 ppc64
ppc64 ppc64 gnulinux '
  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=undef use64bitall=undef uselongdouble=undef
Compiler:
  cc='cc', ccflags ='-fno-strict-aliasing -I/usr/local/include -
D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64',
  optimize='-O2',
  cppflags='-fno-strict-aliasing -I/usr/local/include'
  ccversion='', gccversion='3.4.3 20041212 (Red Hat 3.4.3-9.EL4)',
gccosandvers=''
  intsize=4, longsize=4, ptrsize=4, doublesize=8, byteorder=4321
  d_longlong=define, longlongsize=8, d_longdbl=define, longdblsize=8
  ivtype='long', ivsize=4, nvtype='double', nvsize=8, Off_t='off_t',
lseeksize=8
  alignbytes=8, usemymalloc=n, prototype=define
Linker and Libraries:
  ld='cc', ldflags ='-L/usr/local/lib'
  libpth=/usr/local/lib /lib /usr/lib
  libs=-lnsl -lgdbm -ldb -ldl -lm -lc -lcrypt -lutil
  perllibs=-lnsl -ldl -lm -lc -lcrypt -lutil
  libc=/lib/libc-2.3.4.so, so=so, useshrplib=false, libperl=libperl.a
Dynamic Linking:
  dlsrc=dl_dlopen.xs, dlexit=so, d_dlsymun=undef, ccdlflags='-rdynamic'
  cccdlflags='-fpic', lddlflags='-shared -L/usr/local/lib'

Characteristics of this binary (from libperl):
Compile-time options: USE_LARGE_FILES
Built under linux
Compiled at Mar 19 2008 08:02:47
@INC:
  /usr/local/gways/perl5/5.6.1/lib/5.6.1/ppc64-linux
  /usr/local/gways/perl5/5.6.1/lib/5.6.1
  /usr/local/gways/perl5/5.6.1/lib/site_perl/5.6.1/ppc64-linux
  /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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