NAME

environ – user environment

DESCRIPTION

When a process begins execution, **exec** routines make available an array of strings called the environment; see **exec**(2). By convention, these strings have the form *variable=value*, for example, **PATH=/sbin:/usr/sbin**. These environmental variables provide a way to make information about a program's environment available to programs.

A name may be placed in the environment by the **export** command and *name=value* arguments in **sh**(1), or by **exec**(2). It is unwise to conflict with certain shell variables that are frequently exported by **.profile** files: **MAIL**, **PS1**, **PS2**, **IFS**; see **profile**(4).

The following environmental variables can be used by applications and are expected to be set in the target run-time environment.

HOME The name of the user's login directory, set by **login**(1) from the password file; see **passwd**(4).

LANG The string used to specify internationalization information that allows users to work with different national conventions. The **setlocale**(3C) function checks the **LANG** environment variable when it is called with **""** as the *locale* argument. **LANG** is used as the default locale if the corresponding environment variable for a particular category is unset or null. If, however, **LC_ALL** is set to a valid, non-empty value, its contents are used to override both the **LANG** and the other **LC_*** variables.

For example, when **setlocale**() is invoked as

setlocale(LC_CTYPE, ""),

setlocale() will query the **LC_CTYPE** environment variable first to see if it is set and non-null. If **LC_CTYPE** is not set or null, then **setlocale**() will check the **LANG** environment variable to see if it is set and non-null. If both **LANG** and **LC_CTYPE** are unset or **NULL**, the default "C" locale will be used to set the **LC_CTYPE** category.

Most commands will invoke
setlocale(LC_ALL, "")

prior to any other processing. This allows the command to be used with different national conventions by setting the appropriate environment variables.

The following environment variables correspond to each category of **setlocale**(3C):

LC_ALL If set to a valid, non-empty string value, override the values of **LANG** and all the other **LC_*** variables.

LC_COLLATE This category specifies the character collation sequence being used. The information corresponding to this category is stored in a database created by the **colltbl**(1M) command. This environment variable affects **strcoll**(3C) and **strxfrm**(3C).

LC_CTYPE This category specifies character classification, character conversion, and widths of multibyte characters. When **LC_CTYPE** is set to a valid value, the calling utility can display and handle text and file names containing valid characters for that locale; Extended Unix Code (EUC) characters where any individual character can be 1, 2, or 3 bytes wide; and EUC characters of 1, 2, or 3 column widths. The default "C" locale corresponds to the 7-bit ASCII character set; only characters from ISO 8859-1 are valid. The information corresponding to this category is stored in a database created by the **chrtbl**(1M) command. This environment variable is used by **ctype**(3C), **mbchar**(3C), and many commands, such as **cat**(1), **ed**(1), **ls**(1), and **vi**(1).

LC_MESSAGES This category specifies the language of the message database being used. For example, an application may have one message database with French messages, and another database with German messages. Message databases are created by the **mkmsgs**(1) command. This environment variable is used by **exstr**(1), **gettxt**(1), **srchtxt**(1), **gettxt**(3C), and **gettext**(3I).

LC_MONETARY This category specifies the monetary symbols and delimiters used for a particular locale. The information corresponding to this category is stored in a database created by the **montbl**(1M) command. This environment variable is used by **localeconv**(3C).

LC_NUMERIC This category specifies the decimal and thousands delimiters. The information corresponding to this category is stored in a database created by the **chrtbl**(1M) command. The default **C** locale corresponds to **"."** as the decimal delimiter and no thousands delimiter. This environment variable is used by **localeconv**(3C), **printf**(3S), and **strtod**(3C).

LC_TIME This category specifies date and time formats. The information corresponding to this category is stored in a database specified in **strftime**(4). The default **C** locale corresponds to U.S. date and time formats. This environment variable is used by many commands and functions; for example: **at**(1), **calendar**(1), **date**(1), **strftime**(3C), and **getdate**(3C).

MSGVERB Controls which standard format message components **fmtmsg** selects when messages are displayed to **stderr**; see **fmtmsg**(1) and **fmtmsg**(3C).

NETPATH A colon-separated list of network identifiers. A network identifier is a character string used by the Network Selection component of the system to provide application-specific default network search paths. A network identifier must consist of non-**NULL** characters and must have a length of at least 1. No maximum length is specified. Network identifiers are normally chosen by the system administrator. A network identifier is also the first field in any **/etc/netconfig** file entry. **NETPATH** thus provides a link into the **/etc/netconfig** file and the information about a network contained in that network's entry. **/etc/netconfig** is maintained by the system administrator. The library routines described in **getnetpath**(3N) access the **NETPATH** environment variable.

NLSPATH Contains a sequence of templates which **catopen**(3C) and **gettext**(3I) use when attempting to locate message catalogs. Each template consists of an optional prefix, one or more substitution fields, a filename and an optional suffix.

For example:

NLSPATH="/system/nlslib/%N.cat"

defines that **catopen**( ) should look for all message catalogs in the directory **/system/nlslib**, where the catalog name should be constructed from the *name* parameter passed to **catopen**( ), **%N**, with the suffix **.cat**.

Substitution fields consist of a % symbol, followed by a single-letter keyword. The following keywords are currently defined:

%N	The value of the *name* parameter passed to **catopen**( ).
%L	The value of **LANG** or **LC_MESSAGES**.
%l	The language element from **LANG** or **LC_MESSAGES**.
%t	The territory element from **LANG** or **LC_MESSAGES**.
%c	The codeset element from **LANG** or **LC_MESSAGES**.
%%	A single % character.

An empty string is substituted if the specified value is not currently defined. The separators ''**_**'' and ''**.**'' are not included in **%t** and **%c** substitutions.

Templates defined in **NLSPATH** are separated by colons (**:**). A leading colon or two adjacent colons (**::**) is equivalent to specifying **%N**.

For example:

NLSPATH=":%N.cat:/nlslib/%L/%N.cat"

indicates to **catopen**( ) that it should look for the requested message catalog in *name*, *name***.cat** and **/nlslib/$LANG/***name***.cat**. For **gettext( )**, **%N** automatically maps to "messages".

If **NLSPATH** is unset or **NULL**, **catopen( )** and **gettext( )** call **setlocale**(3C), which checks **LANG** and the **LC_*** variables to locate the message catalogs.

NLSPATH will normally be set up on a system wide basis (in **/etc/profile**) and thus makes the location and naming conventions associated with message catalogs transparent to both programs and users.

PATH The sequence of directory prefixes that **sh**(1), **time**(1), **nice**(1), **nohup**(1), and other utilities apply in searching for a file known by an incomplete path name. The prefixes are separated by colons (**:**). **login**(1) sets **PATH=/usr/bin**. For more detail, see **sh**(1).

SEV_LEVEL Define severity levels and associate and print strings with them in standard format error messages; see **addseverity**(3C), **fmtmsg**(1), and **fmtmsg**(3C).

TERM The kind of terminal for which output is to be prepared. This information is used by commands, such as **vi**(1), which may exploit special capabilities of that terminal.

TZ Timezone information. The contents of this environment variable are used by the functions **ctime**(3C), **localtime**(3C), **strftime**(3C), and **mktime**(3C) to override the default timezone. If **TZ** is not in the following form, it designates a path to a timezone database file relative to **/usr/share/lib/zoneinfo/**, ignoring the first character if it is a colon (**:**); otherwise, **TZ** has the form:

std offset **[** *dst* **[** *offset* **], [** *start* **[** */time* **],** *end* **[** */time* **]]]**

std and *dst* Three or more bytes that are the designation for the standard (*std*) and daylight savings time (*dst*) timezones. Only *std* is required. If *dst* is missing, then daylight savings time does not apply in this locale. Upper- and lower-case letters are allowed. Any characters except a leading colon (**:**), digits, a comma (**,**), a minus (–) or a plus (**+**) are allowed.

offset Indicates the value one must add to the local time to arrive at Coordinated Universal Time. The offset has the form:

hh **[:** *mm* **[:** *ss* **]]**

The minutes (*mm*) and seconds (*ss*) are optional. The hour (*hh*) is required and may be a single digit. The *offset* following *std* is required. If no *offset* follows *dst* , daylight savings time is assumed to be one hour ahead of standard time. One or more digits may be used; the value is always interpreted as a decimal number. The hour must be between 0 and 24, and the minutes (and seconds) if present between 0 and 59. Out of range values may cause unpredictable behavior. If preceded by a ''–'', the timezone is east of the Prime Meridian; otherwise it is west (which may be indicated by an optional preceding ''+'' sign).

start / time, *end / time*
Indicate when to change to and back from daylight savings time, where *start/time* describes when the change from standard time to daylight savings time occurs, and *end/time* describes when the change back happens. Each *time* field describes when, in current local time, the change is made.

The formats of *start* and *end* are one of the following:

J*n* The Julian day n ($1 \le n \le 365$). Leap days are not counted. That is, in all years, February 28 is day 59 and March 1 is day 60. It is impossible to refer to the occasional February 29.

n The zero-based Julian day ($0 \le n \le 365$). Leap days are counted, and it is possible to refer to February 29.

M*m.n.d* The d^{th} day, ($0 \le d \le 6$) of week n of month m of the year ($1 \le n \le 5$, $1 \le m \le 12$), where week 5 means ''the last *d*-day in month *m*'' which may occur in either the fourth or the fifth week). Week 1 is the first week in which the d^{th} day occurs. Day zero is Sunday.

Implementation specific defaults are used for *start* and *end* if these optional fields are not given.

The *time* has the same format as *offset* except that no leading sign (''−'' or ''+'') is allowed. The default, if *time* is not given is 02:00:00.

SEE ALSO

cat(1), **date**(1), **ed**(1), **fmtmsg**(1), **login**(1), **ls**(1), **mkmsgs**(1), **nice**(1), **nohup**(1), **sh**(1), **sort**(1), **time**(1), **vi**(1), **chrtbl**(1M), **colltbl**(1M), **montbl**(1M), **exec**(2), **addseverity**(3C), **catopen**(3C), **ctime**(3C), **ctype**(3C), **fmtmsg**(3C), **getdate**(3C), **getnetpath**(3N), **gettext**(3I), **gettxt**(3C), **localeconv**(3C), **mbchar**(3C), **mktime**(3C), **printf**(3S), **setlocale**(3C), **strcoll**(3C), **strftime**(3C), **strtod**(3C), **strxfrm**(3C), **netconfig**(4), **passwd**(4), **profile**(4), **strftime**(4), **TIMEZONE**(4)