Note: It is strongly recommended that you use the install tool to maintain your system configuration, rather than manually editing this file. For more information on the UNICOS installation and configuration menu system (ICMS), refer to the online help files and to the *UNICOS System Configuration Using ICMS*, Cray Research publication SG–2412.

The `config.mh` file contains values that are used to set general system parameters, kernel generation parameters, kernel subsystem parameters, and programming environment parameters. Default values are either literals or 1 (which enables a subsystem) or (which disables a subsystem). The following tables describe the parameters and their default values, grouped by type and listed in alphabetical order.

Note: In general, a value of `0` disables a parameter, and a value of `1` enables it.

These parameters are set with the following ICMS menus:

```
Configure System
    ->Major Software Configuration

Configure System
    ->Major Hardware Configuration

Build/Install System
    ->Build options

Configure System
    ->IOS Configuration (IOS-E based systems only)
```

Table 12. General system parameters (common)

Parameter	Default value	Description
`CONFIG_DIAGDIR`	`/ce`	Directory where the online diagnostics are kept. This must be a full path name.
`CONFIG_ID`	`UNICOS`	Identification of the operating system.

Parameter	Default value	Description
CONFIG_NODE	*node_name*	Node name of the system, by which it is known to a communications network. See uname(1).
CONFIG_SN	sn*number*	Serial number of the system to generate.
CONFIG_SYS	*system_name*	Name of the system. This information is used by the uname(1) command. Typically, *system_name* is the same as the serial number.
CONFIG_TARGET	(null)	Target of the system to generate. If null, the existing default is used. See target(1).
CONFIG_TMPDIR	/tmp	Name of the desired temporary-file directory. If the TMPDIR environment variable is already defined, this value is not used. See tmpnam(3).
CONFIG_VERSION	*version*	Version name of the system. If unspecified, it defaults to the value of the environment variable LOGNAME. See uname(1).

Table 13. General system parameters (GigaRing based systems only)

Parameter	Default value	Description
CONFIG_ID	UNICOS	Identification of the operating system.
CONFIG_IOS_F	1	GigaRing support.
CONFIG_MK	0	UNICOS/mk operating system (used for CRAY T3E systems only). The default is UNICOS.

Table 14. General system parameters (IOS-E based systems only)

Parameter	Default value	Description
CONFIG_ID	UNICOS	Identification of the operating system.
CONFIG_IOS_F	0	GigaRing support.
CONFIG_IOSA_SN	0	IOS-E serial numbers.
CONFIG_IOSB_SN	0	IOS-E serial numbers.
CONFIG_MK	0	UNICOS/mk operating system (used for CRAY T3E systems only). The default is UNICOS.
CONFIG_NIOS	1	Number of IOS-E machines (0, 1, or 2).

Table 15. Kernel generation parameters

Parameter	Default value	Description
CONFIG_CAM_CPP_LOC	CONFIG_GENBIN/../reqs/cc/mppcpp	The environment variable CAM_CPP_LOCATION is set to the value of CONFIG_CAM_CPP_LOC. The cray-t3e assembler uses this variable.
CONFIG_CPP	CONFIG_GENBIN/../reqs/cc/cpp	Sets the nmake(1) CPP variable to the generation cpp.
CONFIG_CPSAVE	0	The cpset(8) -o option capability. Most released software does not use this option, in which case this parameter has no effect.
CONFIG_GCC	CONFIG_GENBIN/cc	Sets the C default to the generation cc compiler.
CONFIG_GEN_SEGDIR	CONFIG_GENBIN/../lib/segdirs	The environment variable GEN_SEGDIR is set to the value of CONFIG_GEN_SEGDIR. The segldr(1) command uses this variable.

Parameter	Default value	Description
CONFIG_GENBIN	/usr/gen/bin	Full path of the directory that contains the generation software.
CONFIG_GENCMDS	CONFIG_GCC CONFIG_CPP	A list of products that must exist as executables. The existence of the listed products is verified when any part of UNICOS is regenerated using nmake(1).
CONFIG_GENPROD_RULES	0	Repeatable relocatables capability.
CONFIG_MPP_CPP	CONFIG_GENBIN/../reqs/cc/mppcpp	Sets the nmake(1) CPP variable to the generation mppcpp for the cray-t3e target.
CONFIG_PACKAGE	0	Certain nmake(1) targets are disabled when this is enabled. Used for packaging purposes only. 1 indicates that this is a packaging build.
CONFIG_PATH	CONFIG_GENBIN:/bin:/usr/bin:/usr/ucb	Generation software directory paths. The environment variable PATH is set to the value of CONFIG_PATH.
CONFIG_RLS_MAJOR	*integer*	UNICOS major release number.
CONFIG_RLS_MINOR	*integer*	UNICOS minor release number.)
CONFIG_RLS_REVISION	*integer*	UNICOS revision release number.
CONFIG_SUPPORT_DIR	(null)	Full path of the directory that contains the support software.
CONFIG_TRGBIN	/usr/gen/trg	Full path of the directory that contains the targeting software.
CONFIG_UMASK	022	The umask(1) setting to be used during the build.
CONFIG_XLIBS	0	Build and install cross-targeted libraries. This is not available on CRAY T90 IEEE mainframes.
CONFIG_XLIBTARGET	*target*	Desired set of cross-targeted libraries, such as cray-c90 for use on a CRAY T90 mainframe. This is not available on CRAY T90 IEEE mainframes.

Parameter	Default value	Description
CONFIG_MIXED	0	Build and install cross-targeted libraries for a mixed mode (Cray floating-point and IEEE) CRAY T90 CPU system.
CONFIG_MIXEDTARGET	*target*	Desired set of cross-targeted libraries for a mixed mode system, such as `cray-ts,ieee` for use on a Cray floating-point CRAY T90 mainframe.

Table 16. Kernel subsystem parameters

Parameter	Default value	Description
CONFIG_BBG	0	Bus Based Gateway (BBG).
CONFIG_BMM	0	Bit matrix multiply functional unit (`uts` kernel).
CONFIG_CRL	0	Cray/REELlibrarian.
CONFIG_CVT	1	Cray Visualization Toolkit (CVT). If this parameter is set to 1, `CONFIG_X11` must also be set to 1.
CONFIG_DFS	1	Distributed Computing Environment (DCE) distributed file system (DFS).
CONFIG_DM	0	Cray Data Migration Facility (DMF).
CONFIG_ELS	0	CRAY J90 and CRAY J90se support.
CONFIG_FQUOTAS	1	File quotas.
CONFIG_HPI3	0	IPI-3/HIPPI packet driver capability in the kernel.
CONFIG_HSX	0	HSX device driver (`uts` kernel).
CONFIG_IPI3	1	IPI-3/IPI capability in the kernel.
CONFIG_KERBEROS	0	Kerberos support.
CONFIG_MPP	1	CRAY T3D system is attached.
CONFIG_NETMON	1	Network monitor.
CONFIG_NETTOLS	0	Network testing tools.

Parameter	Default value	Description
CONFIG_NFS	1	Network File System (NFS).
CONFIG_NFS3	1	NFS version 3 Protocol (NFS3). CONFIG_NFS must be configured if this is set to 1.
CONFIG_NFSKRB	0	NFS with Kerberos authentication. If this parameter is set to 1, CONFIG_NFS and CONFIG_KERBEROS must also be set to 1.
CONFIG_OWS	1	Operator workstation. This parameter is not used and is provided for compatibility purposes.
CONFIG_RPC	1	Remote process control system (RPC).
CONFIG_TAPE	1	Online tape capability in the kernel.
CONFIG_TCP	1	TCP/IP network system. This parameter must always be set to 1.
CONFIG_TRUSTED	0	Trusted UNICOS.
CONFIG_X11	1	X11 Window Management System.
CONFIG_YP	0	Yellow pages.

Table 17. Programming environment parameters

Parameter	Default value	Description
CONFIG_CRAYLIBS	CONFIG_GENBIN/../lib	The environment variable GEN_CRAYLIBS is set to the value of CONFIG_CRAYLIBS. The compilers and assembler use this variable.
CONFIG_LD_STD_DIR	CONFIG_GENBIN/../lib/cld	The environment variable GEN_LD_STD_DIR is set to the value of CONFIG_LD_STD_DIR. The cld script uses this variable.