

MULTICS INSTALLATION BULLETIN

MIB-158

TO: MIB DISTRIBUTION  
FROM: Arlene Scherer  
DATE: January 24, 1975  
SUBJECT: ONLINE INSTALLATION CHANGES

The following is a list of changes to the standard service system, tools, network, unbundled, author maintained and installation maintained libraries for the week beginning January 20, 1975.

HOW TO READ THIS LISTING:

Each modification is preceded by the MCR number covering it (if there is one), and a brief explanation of the change.

This information is followed by the name of the object segment, help file, include file, or bound segment (or group of the above) involved in the modification.

Also given is the date and time of installation, and the name of the system library to which the change was made.

For bound segments, a list of the components follows, as well as the action which was taken with regard to each component.

An explanation does not accompany the listing of a segment which was "de-installed", or removed because of some problem, but the original installation information may be considered inoperative.

-----  
Multics Project internal working documentation. Not to be reproduced or distributed outside the Multics Project.

\*\*\*\*\*  
MCR 833: In a large system change the unbundled library was set up. Math routines, pl1 and aim were moved to >SSS. The source and object for same were transferred to the new directories >|dd>lang>(

source object lists). In like manner, the profile command and bcpl library routines were "bundled". Fortran, basic and apl remain unbundled. The gcps package was unbundled (moved to >unb). Version One pl1 and fortran were moved to the AM library; The old Version Two compilers were deleted. Please type "help unbundled".

\*\*\*\*\*

01/20/75 0902.9 oncode\_messages\_ moved from UNB to SSS  
01/20/75 0902.9 pl1\_error\_messages\_ moved from UNB to SSS  
01/20/75 0902.9 pl1\_version\_ moved from UNB to SSS  
01/20/75 0902.9 bound\_pl1\_runtime\_ moved from UNB to SSS

moved:  
complex\_decimal\_op\_  
decimal\_op\_  
multi\_decimal\_op\_  
decimal\_sqrt\_  
complex\_binary\_op\_  
fixed\_ops\_  
pl1\_after\_bit\_  
pl1\_after\_char\_  
pl1\_before\_bit\_  
pl1\_before\_char\_  
pl1\_decat\_bit\_  
pl1\_decat\_char\_  
pl1\_date\_  
pl1\_time\_  
translate\_  
unpack\_picture\_  
adjust\_float\_  
picture\_edit\_  
picture\_info\_  
get\_oncode  
getonsource  
get\_onchar  
setonsource  
decimal\_exp\_  
decimal\_exp2\_  
pl1\_snap\_  
bound\_pl1\_runtime\_.bind

01/20/75 0902.9 bound\_display\_ moved from UNB to TOOLS

moved:  
display  
display\_any\_node\_name  
display\_array  
display\_block  
display\_constant  
display\_exp  
display\_list  
display\_source

display\_statement  
display\_symbol  
peek  
show\_declaration  
show\_ms  
show\_statement  
stop\_at  
display\_xfer\_vector  
bound\_display\_.bind

01/20/75 0902.9 bound\_plio2\_ moved from UNB to SSS

moved:  
plio2\_open\_  
plio2\_signal\_  
plio2\_fl\_  
plio2\_data\_  
plio2\_dump\_  
plio2\_debug\_  
plio2\_octptr\_  
plio2\_recio\_  
plio2\_sym\_to\_desc  
plio2\_put\_util\_  
plio2\_ldo\_  
plio2\_pve\_  
plio2\_pdt\_  
put\_data\_var\_all\_  
put\_data\_block\_all\_  
plio2\_get\_util\_  
plio2\_gdt\_  
plio2\_loi\_  
plio2\_gvl\_  
plio2\_gvd\_  
plio2\_gve\_  
assign\_type\_d  
assign\_type\_p  
put\_copy\_  
decode\_oldesc\_  
plio2\_resig\_  
plio2\_dnd\_  
bound\_plio2\_.bind

01/20/75 0902.9 bound\_cg\_.list moved from >ldd>unb>lists to >ldd>lang>lists

01/20/75 0902.9 bound\_cg\_ moved from JNB to SSS

moved:  
code\_generator  
cg\_stat  
make\_mod  
get\_variable  
compile\_entry  
compile\_block  
compile\_statement  
compile\_tree  
aq\_man  
assign\_info  
assign\_op  
adjust\_ref\_count  
store  
load  
save\_value

generate\_constant  
arith\_op  
arith\_data  
fixed\_to\_float  
jump\_op  
compile\_exp  
opcode\_info  
inline\_operation  
length\_op  
check\_o\_and\_s  
prepare\_operand  
eval\_exp  
copy\_temp  
get\_reference  
c\_a  
call\_op  
store\_bit\_address  
stack\_temp  
compare\_ptrs  
set\_indicators  
string\_op  
string\_temp  
long\_op  
load\_size  
cat\_op  
xr\_man  
m\_a  
base\_man  
expmac  
need\_temp  
power\_of\_two  
constant\_zero  
expmac\_test  
state\_man  
min\_max  
complex\_stuff  
pointer\_builtins  
base\_to\_core  
move\_data  
make\_both\_addressable  
exp\_op  
link\_vector  
ctl\_char  
io\_op  
e\_v  
get\_imaginary  
decimal\_op  
convert\_chars  
cg\_error  
cg\_  
bound\_cg\_bind

01/20/75 0902.9 bound\_semant\_ moved from UNB to SSS

moved:  
semantic\_translator  
context\_processor  
expression\_semantics  
lookup  
propagate\_bit  
simplify\_offset

operator\_semantics  
function  
match\_arguments  
compare\_declaration  
check\_star\_extents  
subscriber  
offset\_adder  
builtin  
pl1\_data  
do\_semantics  
alloc\_semantics  
expand\_assign  
expand\_infix  
expand\_prefix  
expand\_primitive  
simplify\_expression  
make\_non\_quick  
lo\_data\_list\_semantics  
io\_semantics  
defined\_reference  
declare  
validate  
declare\_structure  
expand\_initial  
v2pl1\_semant\_  
prepare\_symbol\_table  
generic\_selector  
fill\_refer  
semant\_xfer\_vector  
bound\_semant\_.bind

01/20/75 0902.9

bound\_lang\_util\_ moved from UNB to SSS

moved:

create\_array  
create\_block  
create\_bound  
create\_context  
create\_cross\_reference  
create\_default  
create\_label  
create\_symbol  
create\_token  
create\_identifier  
bindec  
token\_to\_binary  
create\_list  
create\_operator  
create\_reference  
create\_statement  
create\_storage  
pl1\_get  
tree\_manager  
free\_node  
pl1\_stat\_  
get\_array\_size  
get\_size  
refer\_extent  
declare\_constant  
declare\_descriptor  
declare\_picture

declare\_integer  
declare\_pointer  
declare\_temporary  
optimizer  
compare\_expression  
copy\_expression  
reserve  
convert  
share\_expression  
decbin  
parse\_error  
error\_  
decode\_node\_id  
pl1\_error\_print  
binary\_to\_octal\_string  
pl1\_print  
error  
merge\_attributes  
display\_pl1\_map  
sym\_sort\_alphabetic  
binoct  
display\_text  
op\_mnemonic  
operator\_names  
display\_pl1\_text  
lang\_util\_  
util\_xfer\_vector  
mst  
compile\_formats  
gen\_pl1\_symbol  
compile\_link  
name\_assign  
gen\_pl1\_linkage  
initialize\_ext\_static  
initialize\_int\_static  
assign\_storage  
generate\_definition  
macro\_table  
Instruction\_Info  
pl1\_signal\_catcher  
bound\_lang\_util\_.bind

01/20/75 0902.9 bound\_parse\_ moved from UNB to SSS

moved: v2pl1  
parse  
process\_entry  
procedure\_parse  
statement\_type  
do\_parse  
lex  
data  
if\_parse  
statement\_parse  
declare\_label  
context  
evaluate  
expression\_parse  
reference\_parse  
declare\_parse

attribute\_parse  
descriptor\_parse  
default\_parse  
lo\_statement\_parse  
format\_list\_parse  
data\_list\_parse  
on\_parse  
pl1\_symbol\_print  
parse\_xfer\_vector  
bound\_parse\_.bind

01/20/75 0902.9 bound\_bcpl\_library\_ moved from UNB to SSS

moved:  
bcpl\_arithmetic\_  
bcpl\_strings\_  
bcpl\_conversions\_  
bcpl\_machine\_code\_  
bcpl\_command\_lib\_  
bcpl\_filesys\_lib\_  
bcpl\_stream\_io\_  
bound\_bcpl\_library\_.bind

01/20/75 0902.9 tree\_ moved from UNB to SSS

01/20/75 0902.9 pl1\_blast\_ moved from UNB to SSS

01/20/75 0902.9 bound\_pl1\_signal\_ moved from UNB to SSS

moved:  
pl1\_signal\_  
ondata\_  
interpret\_oncode\_  
bound\_pl1\_signal\_.bind

01/20/75 0902.9 assign\_ moved from UNB to SSS

01/20/75 0902.9 bound\_stu\_ moved from UNB to SSS

moved:  
decode\_runtime\_value  
decode\_value  
find\_block  
find\_header  
find\_runtime\_symbol  
find\_symbol  
get\_address  
get\_runtime\_address  
get\_block  
get\_implicit\_qualifier  
get\_line\_no  
get\_location  
get\_runtime\_line\_no  
get\_statement\_map  
get\_runtime\_location  
get\_ref  
offset\_to\_pointer  
pointer\_to\_offset  
remote\_format  
bound\_stu\_.bind

01/20/75 0902.9 bound\_math\_ moved from UNB to SSS

moved:

asin\_  
asinh\_  
atan2\_  
cabs\_  
casin\_  
catan\_  
cexp\_  
cdfp\_  
cfmp\_  
clog\_  
code\_  
csin\_  
csqrt\_  
cxp1\_  
cxp12\_  
cxp2\_  
dasin\_  
dasinh\_  
datan2\_  
dcabs\_  
dcasin\_  
dcatan\_  
dcexp\_  
dcfdp\_  
dcfmp\_  
dclog\_  
dcsin\_  
dcsqrt\_  
dcxp1\_  
dcxp12\_  
dcxp2\_  
derf\_  
dixerfc\_  
dexp\_  
diexp\_  
dlog\_  
dmod\_  
asin\_  
dsinh\_  
dsqrt\_  
dtan\_  
dtanh\_  
dyp1\_  
dyp12\_  
dyp2\_  
erf\_  
exerfc\_  
exp\_  
lexp\_  
log\_  
random\_  
round\_  
sin\_  
sinh\_  
sqrt\_  
tan\_  
tanh\_  
xp2\_  
xp22\_  
xp3\_

bound\_math\_ .bind

01/20/75 0902.9 profile moved from UNB to SSS

01/20/75 0902.9 bound\_alm\_ moved from UNB to SSS

moved:

alm  
alm\_618g\_  
eb\_data\_  
getid\_  
glpl\_  
inputs\_  
object\_  
utils\_  
sthdr\_  
oplook\_  
ascevl\_  
decevl\_  
expevl\_  
getbit\_  
litevl\_  
lstman\_  
merge\_  
modevl\_  
octevl\_  
pakbit\_  
pass1\_  
pass2\_  
postp1\_  
postp2\_  
prlst\_  
prnam\_  
prnter\_  
prwrd\_  
pulnk\_  
pusmb\_  
putout\_  
putxt\_  
setid\_  
table\_  
varevl\_  
vfdevl\_  
alm\_definitions\_  
make\_alm\_object\_map\_  
alm\_source\_map\_  
alm\_include\_file\_  
alm\_cross\_reference\_  
new\_sthdr\_  
alm\_eis\_parse\_  
bound\_alm\_.bind

\*\*\*\*\*

01/20/75 0917.1 old\_pl1 deleted from AM

01/20/75 0917.1 old\_fortran deleted from AM

01/20/75 0917.1 bound\_lang\_util\_ deleted from AM

01/20/75	0917.1	bound_semant_ deleted from AM
01/20/75	0917.1	bound_cg_ deleted from AM
01/20/75	0917.1	bound_pl1_runtime_ deleted from AM
01/20/75	0917.1	bound_plio2_ deleted from AM
01/20/75	0917.1	plio2_messages_ deleted from AM
01/20/75	0917.1	bound_display_ deleted from AM
01/20/75	0917.1	bound_pl1_signal_ deleted from AM
01/20/75	0917.1	bound_fortran_io_ deleted from AM
01/20/75	0917.1	pl1_version_ deleted from AM
01/20/75	0917.1	fortran_version_ deleted from AM
01/20/75	0917.1	pl1_error_messages_ deleted from AM
01/20/75	0917.1	fortran_error_messages_ deleted from AM
01/20/75	0917.1	bound_plio_ moved from UNB to AM
01/20/75	0917.1	bound_pl1_cg_ moved from UNB to AM
01/20/75	0917.1	bound_pl1_utility_ moved from UNB to AM
01/20/75	0917.1	bound_pl1_semant_ moved from UNB to AM
01/20/75	0917.1	bound_pl1_parse_ moved from UNB to AM
01/20/75	0917.1	error_messages moved from UNB to AM
01/20/75	0929.0	bound_gcos_ moved from SSS to UNB
	moved:	gcos
		gcos_abort_
		gcos_attach_file_
		gcos_cc_abort_
		gcos_cc_activity_cards_
		gcos_cc_caller_
		gcos_cc_data_
		gcos_cc_directive_cards_

gcos\_cc\_endjob\_  
gcos\_cc\_file\_cards\_  
gcos\_cc\_goto\_  
gcos\_cc\_ident\_  
gcos\_cc\_incode\_  
gcos\_cc\_limits\_  
gcos\_cc\_loader\_cards\_  
gcos\_cc\_misc\_cards\_  
gcos\_cc\_set\_  
gcos\_cc\_snumb\_  
gcos\_cc\_update\_  
gcos\_check\_for\_mme\_  
gcos\_cleanup\_files\_  
gcos\_close\_file\_  
gcos\_control\_tables\_  
gcos\_cv\_ascii\_gebcd\_  
gcos\_cv\_gebcd\_ascii\_  
gcos\_dump\_slave\_  
gcos\_error\_  
gcos\_ext\_stat\_  
gcos\_fault\_processor\_  
gcos\_gein\_  
gcos\_gein\_pass1\_  
gcos\_get\_cc\_field\_  
gcos\_interpret\_file\_string\_  
gcos\_mme\_bort\_  
gcos\_mme\_call\_  
gcos\_mme\_caller\_  
gcos\_mme\_chek\_  
gcos\_mme\_fadd\_  
gcos\_mme\_fcon\_  
gcos\_mme\_fini\_  
gcos\_mme\_fsye\_  
gcos\_mme\_info\_  
gcos\_mme\_inos\_  
gcos\_mme\_laps\_  
gcos\_mme\_loop\_  
gcos\_mme\_more\_  
gcos\_mme\_mrel\_  
gcos\_mme\_prio\_  
gcos\_mme\_processor\_  
gcos\_mme\_rels\_  
gcos\_mme\_rets\_  
gcos\_mme\_rout\_  
gcos\_mme\_save\_  
gcos\_mme\_sets\_  
gcos\_mme\_snap\_  
gcos\_mme\_syot\_  
gcos\_mme\_time\_  
gcos\_mme\_user\_  
gcos\_mme\_wake\_  
gcos\_open\_file\_  
gcos\_read\_card\_  
gcos\_run\_activity\_  
gcos\_set\_slave\_  
gcos\_sysout\_writer\_  
gcos\_time\_convert\_  
gcos\_write\_  
bound\_gcos\_.bind

01/20/75 0929.0 gcos\_library\_subroutines\_ moved from SSS to UNB  
01/20/75 0929.0 gcos\_system\_software\_ moved from SSS to UNB

\*\*\*\*\*

No MCR: The subtree\_status command was replaced to fix a bug that caused possible inconsistent arguments to the file system. That is, msf acs now use "rew" rather than "sma"; max length of any output line is now 132 characters.

01/22/75 1419.9 bound\_subtree\_status\_ replaced in AM  
replaced: directory\_status\_

\*\*\*\*\*

MCR 894: The adjust\_bit\_count\_ routine was replaced so that it adjusts on the last non-zero component and deletes the remaining zero components, rather than adjust on the last component.

01/24/75 1124.8 bound\_fscom2\_ replaced in SSS  
replaced: adjust\_bit\_count\_

\*\*\*\*\*

MCR 714: As the first step in installation of the Access Isolation Mechanism, ed\_installation\_parms was replaced to know about the new fields in the installation\_parms data base. The system\_info\_ routine in SSS was also replaced to know about the new fields.

01/24/75 1231.1 bound\_admin\_tools\_ replaced in TOOLS  
replaced: ed\_installation\_parms

01/24/75 1231.1 bound\_info\_rtns\_ replaced in SSS  
replaced: system\_info\_  
bound\_info\_rtns\_.bind

01/24/75 1231.1 aim\_template.incl.pl1 added to INCL

01/24/75 1231.1 installation\_parms.incl.pl1 replaced in INCL