TO: Distribution

FROM: Marilyn Hodges

DATE: January 18, 1974

SUBJECT: Multics Change Requests

Attached are copies of Multics Change Requests which were approved
from January 1 through January 15, 1974.

MULTICS CHANGE REQUEST

TITLE: Upgrading of Answering Service to support new Network TELNET protocol.

AUTHOR: D. Wells

SOURCE: (if external) e.g., "User", "Marketing"

STATUS	DATE
Written	12/18/73
Approved	# 1/2/74
Rejected	
Postponed	# 12/26/73
Withdrawn	
Expires	7/2/74

CLASSIFICATION		JUSTIFICATION	
X	Incompatible Change		Marketing Requirement
X	Extension	X	Conformance to Standard
	Restriction		Increased Consistency
	Performance Improvement		Simplification
	Reliability Improvement		Generalization
			Bug Fix

Replaced by proposal MCR _____

Implemented in System _____

Objections/Comments:

Awaiting Design Review.

_____

Install in Tools Library until policy decision regarding final location.

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: Because the Network is converting to a new TELNET protocol, a new Network typewriter IOSIM is being installed. This MCR is separated from the one proposing the change to the user process IOSIM because a particular sequence of installation is required to avoid the creation of nonviable processes.

SUMMARY: The Network portion of the Answering service will be changed to conform to the Network Standard for conversion to the new protocol. This includes the creation of two additional "ICP" sockets for connection to Multics. These new sockets will assume the only the new protocols (FTP and TELNET) will be used on them. The old sockets will be changed to automatically detect the usage of the new protocols and to then switch to them. At some later time, the support of the old protocols will be removed.

IMPLICATIONS: This is a change in standards. Because the Network community is responsible for insuring proper conversion, all users should be informed via normal Network documentation. However, info files will be installed informing users of this change and possible effects.

| MULTICS CHANGE REQUEST | MCR 227 |
| | Page 1 of 1 Pages |

TITLE: Upgrading of user process Network IOSIM to support new TELNET protocol and to add additional functions.

AUTHOR: D. Wells

SOURCE: (if external) e.g., "User", "Marketing"

STATUS	DATE
Written	12/18/73
Approved	1/2/74
Rejected	
Postponed	12/26/73
Withdrawn	
Expires	7/2/74

CLASSIFICATION		JUSTIFICATION	
X	Incompatible Change		Marketing Requirement
X	Extension	X	Conformance to Standard
	Restriction		Increased Consistency
	Performance Improvement		Simplification
	Reliability Improvement		Generalization
			Bug Fix

Replaced by proposal MCR _____

Implemented in System _____

Objections/Comments:

Awaiting Design Review.

Install in Tools Library until policy decision regarding final location.

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: Because the Network is converting to a new TELNET protocol, a new Network IOSIM is being installed. (There is an associated MCR for changes to the Answering Service.) Also, a need has been detected for implementation of full break/read delimiter detection over the Network. In addition, settable (via order call) editing characters are being installed as an experimental feature.

SUMMARY: A new Network IOSIM will be installed. This new IOSIM will support both new and old TELNET protocols. This new IOSIM will support changing break and kill read delimiter characters via standard mechanism (as documented in MPM). This new IOSIM will support changing editing characters via an order call. (This order call will not immediately be documented to users.) This new IOSIM also includes the ios_$order "read_status" order call support for APL and the IO Daemon.

IMPLICATIONS: This is a change in standards. Because the Network community is responsible for insuring proper convertion, all users should be informed via normal Network documentation. However, info files will be installed on Multics informing users of schedules and options chosen for the Multics implementation.

NOTE: At this time also, this new IOSIM will be installed in SSS to avoid problems with the new default search rules. Soon after installation of this IOSIM, the old IOSIM in TOOLS will be deleted.

MULTICS CHANGE REQUEST	MCR 241	
	Page 1 of 1 Pages	

TITLE: Additions to the ARPA Network Host Table	STATUS	DATE
	Written	12/20/73
AUTHOR: Kenneth T. Pogran	Approved	1/2/74
	Rejected	
SOURCE: (if external) e.g., "User", "Marketing"	Postponed	
	Withdrawn	
	Expires	7/2/74

CLASSIFICATION		JUSTIFICATION		Replaced by proposal MCR _____
	Incompatible Change		Marketing Requirement	Implemented in System _____
XX	Extension	XX	Conformance to Standard	Objections/Comments:
	Restriction		Increased Consistency	
	Performance Improvement		Simplification	
	Reliability Improvement		Generalization	
			Bug Fix	

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: Several hosts have recently come up on the ARPA Network whose names are not contained in the installed host table.

SUMMARY: The segment >tools>host_table is updated to include entries for the following Network hosts:

Rutgers University TIP
Rutherford High Energy Laboratory 360/195 (Sussex, England)
University of Illinois ANTS Mark II

MULTICS CHANGE REQUEST	MCR 242

TITLE: stop msa_manager_ from storing segment number in bit count of MSA components	STATUS	DATE
	Written	12/20/73
AUTHOR: Gary Dixon	Approved	1/3/74
	Rejected	
SOURCE: (if external; e.g., "User", "Marketing") MCR Board	Postponed	
	Withdrawn	
	Expires	7/1/74

CLASSIFICATION	JUSTIFICATION	
		Replaced by proposal MCR
[ ] Incompatible Change	[ ] Marketing Requirement	Implemented in System
	[X] Conformance to Standard	Objections/Comments:
[ ] Extension		
	[ ] Increased Consistency	
[ ] Restriction		
[ ] Performance Improvement	[ ] Simplification	
[ ] Reliability Improvement	[ ] Generalization	
[ ]	[ ] Bug Fix	
[ ]	[ ]	

Use these headings: REASONS, SUMMARY, IMPLICATIONS, and optionally
DETAILED PROPOSAL

REASONS:
    In most instances, the bit count on a segment indicates how many bits of valid data the segment contains. msa_manager_ uses the bit count of an MSA (Multi-Segment Area) component to hold the segment number by which the MSA component must be initiated in order to maintain the validity of pointers stored in the MSA in another process.

SUMMARY:
    Change msa_manager_ to set the bit count of new MSA components to (sys_info$max_seg_size * 36), the number of valid bits of data in the MSA component. When truncating an MSA to a zero-length SSA (Single-Segment Area), set the bit count of the SSA to 0.
    When initiating an MSA in a new process: initiate each MSA component with an arbitrary segment number; find the proper segment number for the MSA component from the base number of a pointer stored in the MSA component's header; terminate the MSA component; and re-initiate the MSA component with the proper segment number.

IMPLICATIONS:
    This change will not affect the external interface of msa_manager_.

MULTICS CHANGE REQUEST	MCR 243
	Page 1 of 1 Pages

TITLE: edurf reports dates as 01/01/01	STATUS	DATE
	Written	12/19/73
AUTHOR: Susan Barr	Approved #	1/2/74
	Rejected	
SOURCE: (if external) e.g., "User", "Marketing"	Postponed	
	Withdrawn	
	Expires	7/2/74

CLASSIFICATION		JUSTIFICATION		Replaced by proposal MCR _____
	Incompatible Change		Marketing Requirement	Implemented in System _____
	Extension		Conformance to Standard	Objections/Comments:
	Restriction		Increased Consistency	
	Performance Improvement		Simplification	
	Reliability Improvement		Generalization	
		X	1160002p (Phoenix) Bug Fix	

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: edurf reported dates as 01/01/01

SUMMARY: edurf reports the correct date

MULTICS CHANGE REQUEST		MCR 244	
		Page 1 of 1 Pages	

TITLE: print_dump_tape does not recognize EOF on 9 track tape		STATUS	DATE
		Written	12/19/73
AUTHOR: Susan Barr		Approved H	0/2/74
		Rejected	
SOURCE: (if external) e.g., "User", "Marketing"		Postponed	
		Withdrawn	
		Expires	7/2/74

CLASSIFICATION	JUSTIFICATION	
		Replaced by proposal MCR _____
Incompatible Change	Marketing Requirement	
		Implemented in System _____
Extension	• Conformance to Standard	Objections/Comments:
Restriction	Increased Consistency	
Performance Improvement	Simplification	
Reliability Improvement	Generalization	
	lib0001p (Phoenix) X Bug Fix	

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: print_dump_tape did not check for end of file on 9 track tapes

SUMMARY: program recognizes EOF for 7 and 9 track tapes.

MULTICS CHANGE REQUEST

TITLE: Increase the size of STR-SEG

AUTHOR: S. Webber

SOURCE: (if external) e.g., "User", "Marketing"

STATUS	DATE
Written	12/19/73
Approved #	1/2/74
Rejected	
Postponed	
Withdrawn	
Expires	7/2/74

CLASSIFICATION		JUSTIFICATION	
	Incompatible Change		Marketing Requirement
	Extension		Conformance to Standard
	Restriction		Increased Consistency
	Performance Improvement		Simplification
X	Reliability Improvement		Generalization
		X	Unreported Bug Fix

Replaced by proposal MCR _____

Implemented in System _____

Objections/Comments:

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: STR_SEG (Segment Trailer Segment) is too small. If it overflows the system will crash.

SUMMARY: Increase it from 6K to 16K.

MULTICS CHANGE REQUEST

MCR 246
Page 1 of 1 Pages

TITLE: Fix unlocking bug in get_proc_id	STATUS	DATE
	Written	12/19/73
AUTHOR: S. Webber	Approved #	1/2/74
	Rejected	
SOURCE: (if external) e.g., "User", "Marketing"	Postponed	
	Withdrawn	
	Expires	7/2/74

Replaced by proposal MCR _____

Implemented in System _____

Objections/Comments:

CLASSIFICATION		JUSTIFICATION	
	Incompatible Change		Marketing Requirement
	Extension		Conformance to Standard
	Restriction		Increased Consistency
	Performance Improvement		Simplification
X	Reliability Improvement		Generalization
		X	Bug Fix #219

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: There is currently a bug in get_proc_id that unlocks a lock with a "STZ". It should use "STACQ".

SUMMARY: Replace the "stz" with appropriate code.

MULTICS CHANGE REQUEST

TITLE: Extend fsm to handle new meters

AUTHOR: _____ S. Webber _____

SOURCE: (if external) e.g., "User", "Marketing"

STATUS	DATE
Written	12/21/7
Approved	# 1/2/74
Rejected	
Postponed	
Withdrawn	
Expires	7/2/74

Replaced by proposal MCR _____

Implemented in System _____

Objections/Comments:

CLASSIFICATION		JUSTIFICATION	
	Incompatible Change		Marketing Requirement
X	Extension	•	Conformance to Standard
	Restriction		Increased Consistency
	Performance Improvement		Simplification
	Reliability Improvement		Generalization
			Bug Fix
		X	Gain Insight

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: Several new page control meters have been added to the system. A means
is needed to get and display these. fsm is the obvious place to do this.

SUMMARY: Add new output to the "-page" option of fsm.

MULTICS CHANGE REQUEST

MCR	248	
Page 1 of 1 Pages		

TITLE: Fix bug in absentee dim's condition handler

AUTHOR: E. Stone

SOURCE: (if external) e.g., "User", "Marketing"

STATUS	DATE
Written	12/26/73
Approved #	1/2/74
Rejected	
Postponed	
Withdrawn	
Expires	7/2/74

CLASSIFICATION		JUSTIFICATION	
	Incompatible Change		Marketing Requirement
	Extension		Conformance to Standard
	Restriction		Increased Consistency
	Performance Improvement		Simplification
	Reliability Improvement		Generalization
		X	Unreported Bug Fix

Replaced by proposal MCR _____

Implemented in System _____

Objections/Comments:

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: The description of the machine conditions in this dim's condition handler describe those of the 645 and should be changed to reflect the machine conditions of the 6180 by means of the standard include file.

MULTICS CHANGE REQUEST	MCR 249
	Page 1 of 1 Pages

	STATUS	DATE
TITLE: Install update_handler_ again and change interface		
	Written	12/26/7
	Approved	1/2/7
AUTHOR: E. Stone	Rejected	
SOURCE: (if external) e.g., "User", "Marketing"	Postponed	
	Withdrawn	
	Expires	7/2/7

CLASSIFICATION	JUSTIFICATION	
Incompatible Change	Marketing Requirement	Replaced by proposal MCR _____
Extension	• Conformance to Standard	Implemented in System _____
Restriction	Increased Consistency	Objections/Comments:
Performance Improvement	Simplification	
Reliability Improvement	Generalization	
	X Unreported Bug Fix	

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: Two programs call update_handler_ infrequently. This fact was overlooked
and it was removed from the system 6 months ago.

SUMMARY: At the same time the interface to update_handler_ should be changed to
reflect the input required by the new acl primitives. The two callers of
update_handler_ (archive_sort and reorder_archive) will be modified also.

IMPLICATIONS: No problem results in the interface change since update_handler_ is
an internal interface.

MULTICS CHANGE REQUEST

MCR 251
Page 1 of 1 Pages

TITLE:	Fix bug in backup_load	STATUS	DATE
		Written	12/26/73
AUTHOR: E. Stone		Approved	1/2/74
		Rejected	
SOURCE: (if external) e.g., "User", "Marketing"		Postponed	
		Withdrawn	
		Expires	2/7/74

CLASSIFICATION		JUSTIFICATION		
	Incompatible Change		Marketing Requirement	Replaced by proposal MCR _____
	Extension		Conformance to Standard	Implemented in System _____
	Restriction		Increased Consistency	Objections/Comments:
	Performance Improvement		Simplification	
	Reliability Improvement		Generalization	
		X	Bug Fix #225	

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: Allow users without access to phcs_ to use the reloader with the
-debug option.

A temporary change was made to the reloader to allow backup of 256K
segments. This was done by calling phcs_$set_max_length. It was not
realized that non-privileged users do make use of the reloader.

IMPLICATIONS: This change will be removed when 256K segments are available to users.

MULTICS CHANGE REQUEST

MCR 252
Page 1 of 1 Pages

TITLE: Allow PL/1_operators_ to be different in outer rings	STATUS	DATE
	Written	12/31/73
AUTHOR: Eleanor Stone	Approved ✗	1/8/7~
	Rejected	
SOURCE: (if external) e.g., "User", "Marketing"	Postponed	
	Withdrawn	
	Expires	7/8/74

CLASSIFICATION		JUSTIFICATION		Replaced by proposal MCR _____
X	Incompatible Change		Marketing Requirement	
	Extension	•	Conformance to Standard	Implemented in System _____
	Restriction		Increased Consistency	Objections/Comments:
	Performance Improvement		Simplification	
	Reliability Improvement		Generalization	
		X	Unreported Bug Fix	

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: The procedure makestack assummed that the PL/1_operators_ used in an outer ring was the same in all rings.

This assumption was made in placing pointers to operators required by alm in the stack header.

These pointers may be derived without using the values in the ring-0 stack header and will permit installation of the EIS operator segment in the on-line library on a trial basis.

MULTICS CHANGE REQUEST	MCR	253
	Page 1 of Pages	

TITLE: Install new LISP subsystem	STATUS	DATE
	Written	12/20/73
AUTHOR: David P. Reed, David A. Moon, Alexander Sunguroff	Approved	1/8/74
	Rejected	/ /
SOURCE: (if external) e.g., "User", "Marketing"	Postponed	
Project MAC	Withdrawn	
	Expires	7/8/74

CLASSIFICATION		JUSTIFICATION		Replaced by proposal MCR _____
X	Incompatible Change		Marketing Requirement	Implemented in System _____
X	Extension	X	Conformance to Standard	Objections/Comments:
	Restriction	X	Increased Consistency	**To be installed in Author Maintained Library**
X	Performance Improvement		Simplification	
X	Reliability Improvement	X	Generalization	
			Bug Fix	

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: The LISP subsystem allows users to write, debug, execute, and compile
programs written in the LISP language as defined by MIT's Project MAC
and Artificial Intelligence Laboratory. The dialect of LISP which
is implemented is known as MACLISP. Included in the subsystem are
a LISP interpreter system, a LISP compiler, a special tracing/debugging
package written for LISP (in LISP), and a program which allows formatting
of LISP programs and data files (much like indent's operation for PL/I).

SUMMARY: The change involves deleting the old LISP subsystem, and installing a new one
in its place.

IMPLICATIONS: The new lisp system is incompatible with the old one; however, the old one
is unused at present, and does not work on the H6180 processor. Will enable
a large number of software packages written at Project MAC and the Artificial
Intelligence Laboratory to be carried over to and run on Multics. These
packages include MACSYMA (a mathematical symbolic manipulation system),
CONNIVER (an artificial intelligence language), MICRO-PLANNER (another AI
language), and SHRDLU (an English-language understanding system), as well
as a DOCTOR (ELIZA).
(see MPM Revision 15 for documentation of the lisp and lisp_compiler commands.)

MULTICS CHANGE REQUEST		MCR 254	
		Page 1 of 6 Pages	

TITLE: gcos daemon changes	STATUS	DATE
	Written	1/2/74
AUTHOR: P. Haber	Approved #	1/8/74
	Rejected	
SOURCE: (if external) e.g., "User", "Marketing"	Postponed	
	Withdrawn	
	Expires	7/8/74

CLASSIFICATION		JUSTIFICATION		Replaced by proposal MCR _____
	Incompatible Change		Marketing Requirement	
	Extension	X	Conformance to Standard	Implemented in System _____
	Restriction	X	Increased Consistency	Objections/Comments:
	Performance Improvement		Simplification	
	Reliability Improvement		Generalization	
		X	Unreported Bug Fix	

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: See attached

The following changes are needed to fix various bugs in the gcos
daemon and to make the daemon conform more closely to actual
gcos. Each change discussed will include reasons, summary and
implications.

1) Reason

The daemon currently converts gcos priority values to
Multics priority values used to queue absentee and dprinting
incorrectly.

Summary

Correct conversion code.

Implications

Daemon will convert priority values correctly.

Detailed Proposal

line 205 of gcos_read_cards_ from
     urgency = divide (urgency, 21, 17, 0);
to
     urgency = divide (64 - urgency, 21, 17, 0) + 1;
Add above line to gcos_read_tape_ after line 669.

2) Reason

Requests are "imcv" and "imcv9" where imcv => 7 track tape.
Multics tape software uses 9 track as default.

Summary

Change daemon requests to "imcv" and "imcv7", where imcv =>
9 track tape. Change gcos daemon document to reflect.

Implications

Increased consistency between Multics and gcos daemon tape
conventions.

Detailed Proposal

Lines 233-244 of gcos_read_tape_

     if arg = "imcv9" => if arg = "imcv7"
     then do;
          tape_type = ",9track"; => tape_type = "7track";

```
        i = 6;
    end;

    else
    if arg = "imcv"
    then do;
        tape_type = ",7track"; => tape_type = ",9track";
        i = 5;
    end;
```

3) Reason

Gcos daemon should be referred to as "GCOS.SysDaemon" by
system rather than "gcos.SysDaemon" for increased
consistency with gcos conventions.

Summary

Change process overseer check so daemon can be logged in as
GCOS SysDaemon

Implications

Phoenix will have to reregister the gcos daemon.

Detailed Proposal

Line 179 of gcos_daemon_init_ from
```
    if name ^= "gcos" |
to
    if name ^= "GCOS"
```

4) Reason

Entry to set maximum queue priority attempts to set a return
argument with which it was not called. Also, does not check
validity of priority value.

Summary

Eliminate false argument setting, check priority value.

Implications

Daemon will not get a wierd fault if operations attempts to
set an invalid priority value.

Detailed Proposal

line 454 of gcos_queue_job_ from
```
    gcos_daemon_stat_$max_priority = a_priority;
```

to
```
      if a_priority < gcos_daemon_stat_$low_priority |
      a_priority > gcos_daemon_stat_$high_priority
      then call com_err_ (0, "gcos_queue_job_",
      "Attempt to set invalid priority: ^d", a_priority);
      else
      gcos_daemon_stat_$max_priority = a_priority;
      return;
also    add    high_priority    and    low_priority    to
gcos_daemon_stat_.
```

5) Reason

Operation of daemon requires that its working directory be as specified in data base gcos_daemon_stat_, but return from admin mode does not check to insure this.

Summary

Insert code to change to appropriate directory after returning from admin mode.

Implications

will avoid strange behavior if operations should switch working directories while in admin mode.

Detailed Proposal

```
Add after line 234 of gcos_daemon
      input_dir = substr (gcos_daemon_stat_$input_dir,
      1, gcos_daemon_stat_$input_dir_len);
Add after call to listen_$admin
      call change_wdir_ (input_dir, code);
      if code = 0
      then call com_err_ (code, "gcos_daemon",
      "error changing to ^a", input_dir);
```

6) Reason

gcos daemon should recognize tape options with or without leading hyphens. Gcos does not use hyphens for tape command options; Multics does. Whichever the operator is used to should work.

Summary

Make daemon recognize hyphenated tape options also: change daemon document to reflect this.

Implications

Will help avoid operator errors.

Detailed Proposal

```
line 268 of gcos_read_tape_
        if arg = "all"
to
        if arg = "all" | arg = "-all"
line 272
        if arg = "take"
to
        if arg = "take" | arg = "-take"
line 276
        if arg = "start"
to
        if arg = "start" | arg = "-start"
line 280
        if arg = "delete"
to
        if arg = "delete" | arg = "-delete"
```

7) Reason

Gcos daemon does not check access for a given job submitter
to needed directories before queueing absentee job in name
of submitter.

Summary

Add code to make access check.

Implications

Jobs with incorrect access will abort when submitted rather
than when executed. Daemon will print out a meaningful
error message as opposed to absentee being unable to begin
execution of a job.

Detailed Proposal

In initialization work for gcos_read_, get internal static
pointers to input_dir and pool_dir from hcs_$gs_get_ptr.
After user_name is established for a given job, use
hcs_$fs_get_mode to make sure user_name has sma access to
both directories.

8) Reasons

If more than one invocation of the daemon exists, quitting while in admin mode will cause the daemon to return to the previous invocation of its command processor rather than to pass the quit to Multics.

Summary

Make daemon bypass all established quit handlers when in admin mode.

Implication

Change must await installation of MCR-069 and the PL/I EIS compiler (see Detailed Proposal).

Detailed Proposal

line 399 of gcos_daemon from
    revert condition (quit)
to
    on condition (quit) system;

9) Reason

Daemon should return to command level when card hopper is empty and an eof card has just been read.

Summary

Check for eof when reading cards and hopper is empty.

Implications

None that I can think of.

Detailed Proposal

Add an "eof_found" switch argument to gcos_read_cards_. Have gcos_daemon check it and go to command level if set.

MULTICS CHANGE REQUEST	MCR 256
	Page 1 of 1 Pages

TITLE: Installation of 355 software tools	STATUS	DATE
	Written	1/2/74
AUTHOR: D. Wells	Approved ℋ	1/8/74
	Rejected	
SOURCE: (if external) e.g., "User", "Marketing"	Postponed	
	Withdrawn	
local	Expires	7/8/74

CLASSIFICATION		JUSTIFICATION		Replaced by proposal MCR _____
	Incompatible Change		Marketing Requirement	
	Extension	•	Conformance to Standard	Implemented in System _____
	Restriction		Increased Consistency	Objections/Comments:
	Performance Improvement	X	Simplification	
X	Reliability Improvement	X	Generalization	
			Bug Fix	

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: Install previously uninstalled tools used in creating DataNet 355 load files.

SUMMARY: Install two programs (plus supporting subroutines) to

      1) assemble a 355 source file;
      2) produce a core image file from previous assemblies.

DETAILED PROPOSAL: Install "map 355" and "build 355". These programs present a user
                interface very similar to other compilers and loaders/binders. They
                actually perform the assemblies and loads by creating a gcos job deck
                and invoking the gcos simulator.

MULTICS CHANGE REQUEST

MCR	257
Page 1 of 1 Pages	

TITLE: change tape configuration cards

AUTHOR: N. I. Morris

SOURCE: (if external) e.g., "User", "Marketing"

Internal

STATUS	DATE
Written	1/2/74
Approved	# 1/8/~
Rejected	
Postponed	
Withdrawn	
Expires	7/8/74

CLASSIFICATION		JUSTIFICATION	Replaced by proposal MCR _____
	Incompatible Change	X	Marketing Requirement	Implemented in System _____
X	Extension		Conformance to Standard	Objections/Comments:
	Restriction		Increased Consistency	
X	Performance Improvement		Simplification	
	Reliability Improvement		Generalization	
			Bug Fix	

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: In the near future, the tape DCM will be modified to allow the use of more than one physical tape channel. Information will have to be provided as to the number of channels available. The configuration deck should be modified to reflect the need for this additional information.

SUMMARY: The PRPH card will be modified to remove the TAP7 and TAP9 items since these items contain redundant information. Instead the card will appear as shown:

PRPH TAPE Channel#   nchannels

The TAPE card will be modified to contain the information formerly on the PRPH card. The new format of the TAPE card will be as shown:

TAPE nsysdrives maxdrives f9drive n9drives f7drive n7drives

MULTICS CHANGE REQUEST	MCR 258
	Page 1 of 1 Pages

TITLE: Fix to 355 bug	STATUS	DATE
	Written	1/3/74
AUTHOR: R.B. Snyder	Approved H	1/8/74
	Rejected	
SOURCE: (if external) e.g., "User", "Marketing"	Postponed	
local	Withdrawn	
	Expires	7/8/74

CLASSIFICATION		JUSTIFICATION		Replaced by proposal MCR _____
	Incompatible Change		Marketing Requirement	Implemented in System _____
	Extension		Conformance to Standard	Objections/Comments:
	Restriction		Increased Consistency	
	Performance Improvement		Simplification	
X	Reliability Improvement		Generalization	
		X	Bug Fix #233	

Use these headings: REASONS, SUMMARY, IMPLICATIONS, DETAILED PROPOSAL (Optional)

REASONS: Queued status is not being thrown away by tty_inter on a
stop_channel operation.

SUMMARY: tty_inter will be changed to search its status queues for
status for a line for which a stop_channel is to be per-
formed. These status words will be thrown away.

IMPLICATIONS: none