

To: Distribution  
From: F. C. Smith  
Date: November 18, 1975  
Subject: Multics General Development Subgroup Status Report

Meeting ScheduleThose Attending

October 30, 1975

Dennis Capps, Tim Dempsey, Gary Dixon, Ross Klinger, Txom McGary, Janice Phillipps, Roger Roach, and Frank Smith.

November 13, 1975

Dennis Capps, Tim Dempsey, Txom McGary, Janice Phillipps, Roger Roach, and Frank Smith.

## 1. Tapes (Ross Klinger and Janice Phillipps)

The tape\_in/tape\_out MTB is still somewhere in the publication mill at Honeywell. Some new ideas have been received since the MTB was finished, and are under consideration.

The entries for tape\_ioi\_ have all been defined, but there is still some controversy over the names that some of them should have. There are 23 entries, and they will do everything that is possible with the tape drives. While Janice, Bill Silver, and Ross have all been working on the design of tape\_ioi\_, it is not on anyone's task list, and it remains to be decided who is going to implement and document it. If PDO does all the work, we will be putting in more than the one person-year that we have committed to the tape project. We would rather spend the time working on features that are visible to users.

The tape\_archive command is waiting for resources. It needs more design work.

Janice mentioned that a tape dump facility for Multics is necessary. Two users have turned up in the past week with tapes that the standard DIM's could not read because of hardware errors. SIPB has a tape dump program, but it lacks some features that are necessary for a general tape dumping facility.

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

Janice is waiting for time to test the latest changes to the spooler. These changes will provide an option to use 800 bpi or 1600 bpi to write the tape.

## 2. Runoff (Dennis Capps and Tim Dempsey)

Tim has started to work with Dennis on the OS version of runoff. The programs have all been compiled and link-edited, and debugging is going well. The current version can handle plain text with headers, footers, and footnotes, but the more complicated features of runoff remain to be tested. A usable version is expected to be finished by the end of November, and installation of runoff on OS is scheduled for the end of the year.

Problems that still exist include the large region required and the choice of a tradeoff between a common runoff for both OS and Multics and efficiency on both systems. It is hoped that the final version of runoff will be able to process plain text in a small region, but use of the more esoteric features of the program will probably require more storage.

It was decided that the OS version of runoff should accept only one file name on the command line. This will result in some reduction in the region size, and is not considered to be an inconsistency between the two versions, as command line formats are a system-dependent feature.

## 3. Library Tools (Gary Dixon)

The library tools subgroup has disbanded, since Gary is the only person left working on library tools. Gary's library tools work has been brought into the General Development Subgroup. There is no definite completion date for this work, as other projects, such as the JANUS system have priority, and Gary will spend only a small amount of time on library tools.

## 4. Consistent System (JANUS) Support (Gary Dixon and Txom McGary)

Txom and Gary spent four days at a seminar learning about the internal structure of the JANUS system. The JANUS bug report phone has been turned on, and they will start fielding JANUS problems soon.

## 5. User Accounts Support (Frank Smith)

The bug fixes to make new\_proj delegate a project properly are almost ready to try out in the system administration library.

A new problem has turned up in the monthly billing programs. With the larger number of projects now on the system, the program which resets the disk usage figures in the directories get a KST overflow. The change to correct this is a minor one, to terminate each directory after resetting its disk usage.

#### 6. Minicomputer Support (Frank Smith)

The situation at the Sloan School is almost back to where it was before the head crashes cause the loss of out work on Rev. 8 of DOSVM. The Rev 8 changes have been reentered, and the new system is waiting for time to check it out.

LNS has acquired a CAMAC branch driver for its Prime computer, and has several modules which they intend to use the computer to control. CAMAC is a set of standard interfaces for using a computer to control lab equipment and other peripherals. LNS has asked PDO to provide software to operate their equipment under the Prime operating system.

PROJECT Multics General Development Subgroup AREA General Development

TASK DESCRIPTION	PERSONNEL	START	FINISH	P-%	CHANGES-SIAIUS
Consistent System Support	Dixon McGary	CONTINUING task		100%	Emphasis is currently on the JANUS subsystem
Mini-computer Support: LNS and Sloan Prime 300's	Smith Ackerman- Lewis	CONTINUING task		50%	Working on CAMAC for LNS and reInstalling Rev 8 of DOSVM
Mini-computer Support: Interface with PDP11 Users' Group	Smith	CONTINUING task		5%	Primarily attending the meetings
User Accounts Support	Smith	CONTINUING task		50%	Working on fixes for monthly billing and changes to edit PCOL
Library tools: complete and Install	Dixon			1.0M	Task currently delayed due to work on JANUS
sort_seg: MTB on duplicate line elimination	Klinger			1.0M	Waiting for some free time
Runoff: Multics PL/I version	Capps	06/03/74 06/03/74	01/06/75 03/12/75	6.0M 7.0M	In trial use by staff (Honeywell and MIT)
Runoff: OS version	Capps Dempsey	03/17/75 03/17/75	06/27/75 11/28/75	2.0M 8.0M	Debugging progressing well
Runoff: Performance Improvements	Capps Dempsey			2.0M	Will have to reduce CPU on Multics, reglor size to ISO
Runoff: Enhancements	Capps				Exact details to be determined later
Tapes: complete tape_ans1_/tape_lbm_PLM	Klinger		10/31/75 11/28/75	3.0M	Almost done
Tapes: tape_in/tape_out	Phillips	07/01/75 07/28/75	10/06/75 12/31/75	2.0M	Task delayed by work on spooler. New MTB is ready.
Tapes: design tape_lol_	Klinger Phillips	07/01/75 08/04/75	12/31/75 12/31/75	2.0M	Bill Silver is writing the MTB

TASK DESCRIPTION	PERSONNEL	START	FINISH	P-W	CHANGES-STATUS
Tapes: design tape_raw_	Kilinger Phillipps	10/05/76			relies heavily on tape_lol_ design
Tapes: tape utilities	Kilinger Phillipps				Waiting for tape_lol_ specifications to be determined
Tapes: copy_file	Kilinger				MTB published and design review held
Tapes: augment analyze_device_ status_	Kilinger Morris			1.0H	needed for tape_lol_
Tapes: universal 9 bit to 9 bit code convertor	Kilinger			1.0H	