

To: Distribution
From: T. H. Van Vleck
Date: 11/12/73
Subject: System Administration Status

The problem of the Initializer process hanging because some other process could not be destroyed has plagued us several times since last report. Steve Webber has worked out a hardcore modification, which allows the destruction of a process to proceed in two phases, with the Initializer blocked in ring 4 instead of waiting in ring 0 while the process to be destroyed completes its destruction. This change required fairly substantial changes to the Answering Service; the major changes were in dialup_, absentee_user_manager_, and daemon_user_mnager_. Checkout of the modified pxss and the modified answering service has gone slowly, but we now think we know how to make it work.

The October billing was suspiciously remunerative for disk. We took in more money than we could have if all pages on the disk were charged to users. Investigation showed that our disk revenue doubled on the day that system 21.0 was installed. This problem was traced to the special salvager which modified the directory format for system 21.0. The time-record-product field in the directory was accidentally doubled. Arrangements are being made to send a letter to all projects explaining the mistake and to credit all accounts.

A series of discussions are underway concerning the possibility of improving the reliability of the Multics Storage System, and of adding desirable features such as support for detachable packs.

The change of the Initializer's access control name to "Initializer.SysDaemon.z" has been submitted. The removal of ">tools" from the default search rules has run into a snag; the daemon processes look for >tools>mrdd_ before the daemon's process overseer has been located, and so the daemons are unable to attach their I/O streams. Some way around this will be invented.

New versions of the System and Project Administrator's Manuals are almost complete. The Initializer Messages and Answering Service Commands MOSN's have been updated, and two MOSN's on Network operation also completed.

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Future Plans

A source-extraction daemon is needed so that we can give users controlled access to the source of the system. This should be a simple-enough adaptation of code we already have. The code will enable us to charge users for source extractions, and to insert a message at the beginning of each file extracted to the effect that the copy is provided for examination only (so's we can protect our copyright).

The improvements to the printer DIM are proceeding. When completed, the will allow users to request printing through the perforations on the paper, and permit the printing of "separator bars" between pieces of output to aid the operators in the separation of output.

PROJECT CHANGES-SIAIUS AREA _____

TASK DESCRIPTION	PERSONNEL	START	FINISH	M-W	CHANGES-SIAIUS
Correct mistake in October disk billing	THVV	11/01/73	11/15/73		
Initializer loops if process cannot be destroyed.	THVV, SHW	11/07/73	11/08/73		Answering service and traffic control mods done. Need integration. Progressing.
Printer DIM improvements.	THVV				
Minor fixes to mail	THVV		11/09/73		Submitted.
Improve string and arithmetic active functions	THVV		11/09/73		Submitted.
New disk statistics program	THVV				Ready to submit except for documentation.
Directory auditing commands	THVV		11/09/73		Submitted.
Install new billing program	THVV				Needs documentation and removal of MIT-specific code. In use locally. Submitted.
Fix minor bug in rename_pnts_	THVV		11/09/73		
Restore check on total CPU.	THVV				done. Will go in with AS 7.4
Change initializer access name to Initializer.SysDaemon.z	THVV		11/09/73		Submitted.
Fix bugs in system_control_.	THVV		11/09/73		Submitted.
Remove >tools from default search path.	THVV				One more development run needed.

PROJECT _____ AREA _____

TASK DESCRIPTION	PERSONNEL	SIARI	FINISH	M-W	CHANGES-STATUS
Update System Administrator's Manual.	THVV				progressing.
Update Project Administrator's Manual.	THVV				progressing.
Update Initializer Messages MOSN.	THVV		11/06/73		submitted.
Produce MOSN's on Network.	THVV		11/08/73		submitted.
Update Answering Service Commands MOSN.	THVV		11/09/73		submitted.
Create source extraction daemon.	THVV				
Make sys_full_report work again.	THVV				
Make console_report work again.	THVV				
Modify system control for new SYSERR.	THVV				
Create new project for unprivileged daemons.	THVV				
Eliminate ACL's on system tape.	THVV				MCR pending
Design new PNT format.	THVV				
Fix disk accounting programs for 72 bit time-page-product.	THVV				Awaiting hardware change.

PROJECT _____ AREA _____

TASK DESCRIPTION	PERSONNEL	START	FINISH	M-M	CHANGES-SIAIUS
Fix message coordinator bug on lost wakeups.	THVV				Coded and tested. Awaits MCR approval.
Make dial command usable.	THVV				MTB submitted.
Design one-time passwords.	THVV				
Fix minor bug in ed_installation_parms.	THVV				MCR pending
Make new version of trace_stack.	THVV				MCR pending. Partly coded.
Storage System Improvements.	THVV, SHM, AB				Proceeding.
Tape billing command	THVV				Skeleton written.
Tape label generator.	THVV				Coded and tested.

