

SALTZER

TO: MTR Distribution

FROM: Systems Maintenance and Assurance Group
Grace Ackerman-Lewis, Recorder

DATE: July 27, 1976

SUBJECT: Systems Maintenance and Assurance Group Status Report

I. Significant Events

Several interesting things have happened this last month. Gary has finished up working on Janus and the library tools and is taking a short vacation before joining the Systems Assurance group full time. So---we are now a full three person group again. Accordingly we have made up the following schedule for task rotation. The area of responsibility will be shifted every two months to give each of us experience in all areas.

	Aug./Sep.	Oct./Nov.	Dec./Jan.
Hardcore Installations	Gary	Grace	Peter
Online Installations	Peter	Gary	Grace
Auditing Hardcore Install.			
Crash Analysis	Grace	Peter	Gary
Performance Monitoring			

One thing discussed at our last meeting was whether we need to continue maintaining listings for the unbundled and language libraries. We will talk with CISL about this to get their reaction. The language library submissions would still be recompiled here, but no listings generated. We would rely on microfiche if we needed to look at listings. (In our collective memory, no one has needed to look at

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these listings to solve a system problem.) At the same time, Gary will talk to CISL concerning the usefulness (to them) of the hardcore MIBs. They can't be of much use for double checking the installations as they are not published until long after the actual installation. Perhaps some more abbreviated form of the current MIB would serve equally well as documentation of the systems installed.

Three of the Billerica Disks were vacated and removed from the system on July 11. We are now running with one MPC again which does make us somewhat slower.

II. Online Installations

The online installations have been going slowly due both to sloppy submissions which have required much time to correct, and inefficient multi-plexing on the part of Grace, who has found it difficult to both do the installations and make sure all the corrections get done. She hopes to find a better way of handling all the back-and-forthing it takes to get a submission in properly. Starting on 7/26/76 a record will be kept on submissions and how much effort is expended to get one in shape to be installed. Perhaps from this a way can be found to both catch the errors at the source and process those forms which do have problems in a more timely manner. So far this month there have been about 15 installations, about one half of what there should have been. One of these installations was a new answering service which fixed many problems. There are also two other big submissions plodding through testing - new network programs (about 100 modules) and a basic submission which has required many corrections.

III. Hardcore Installations

Two hardcore systems were installed during the last 4 weeks. MSS 28.9 contained the re-compilation of all hardcore modules not compiled with currently installed compilers. MSS 28.10 contained a new disk DIM with better error recovery, the new realtime/deadline scheduler, the addition of partition rebuilding, and several bug fixes. Also installed was a trap for recent system trailer segment problems.

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IV. Crash Analysis

We are still experiencing hardware errors on both CPU's. Bugs in the message coordinator and online salvager have been fixed. Still outstanding is a bug in the IMP software which caused several 'out-of-core' crashes.

Summary of Crashes June 26 - July 23

	06/26 07/01	07/02 07/08	07/09 07/15	07/16 07/23	Total Crsh
Hardware	7	0	4	2	13
Software	2	4	2	2	10
Environment	0	1	0	0	1
	9	5	6	4	24

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PROJECT _____ Systems Assurance Subgroup _____ AREA _____ Continuing Tasks _____

TASK DESCRIPTION	PERSONNEL	SIARI	FINISH	M-W	CHANGES-SIARI
Online Library Installations	Ackerman-Lewis	Continuing Task	150%		~10 changes per week is our performance goal
Hardcore and BOS Library Installations	Kelley	Continuing Task	140%		1 system per week is our performance goal
Audit Hardcore Installations	Dixon	Continuing Task	3%		New Task to insure Hardcore Library consistency
System Performance Monitoring	Ackerman-Lewis	Continuing Task	5%		1 or 2 tests per week
Provide Input to System Design Process	ALL	Continuing Task	5%		continue reasing MTBs, attending Design Reviews
Monitor Documentation Status	ALL	Continuing Task	1%		have installed ~240 new or reformatted info sags
Maintain System Libraries	ALL	Continuing Task			Rush effort underway to insure consistency of Hardcore Libraries
Maintain System Listings	Pitts	Continuing Task	25%		100 listings per week is our performance goal
Do Monthly, Weekly Maintenance - xrefs, maps, etc	Ackerman-Lewis	Continuing Task	1%		
Consulting	ALL	Continuing Task	1%		Serving as online consultant

PROJECT Systems Assurance Subgroup AREA Interrupt-Driver Tasks

TASK DESCRIPTION	PERSONNEL	SIARI	FINISH	M-H	CHANGES-SIARIUS
Crash Analysis	Kelley	AS	Needed	20%	currently we analyze about 6 crashes per week
Problem Investigation and Correction	ALL	AS	Needed	5%	10 to 20 problems occur per week
Provide Support for Operations	ALL	AS	Needed	2%	
Monitor Configuration Requirements	ALL	AS	Needed	1%	monitoring phone line and disk usage
Supervise Test Sessions on MIT Multics	ALL	AS	Needed	<1%	protect MIT hierarchy during test session
Maintain I/O Daemon	Kelley	AS	Needed	<1%	Little maintenance required now
Maintain Ring 1, Accounting Data Bases	ALL	AS	Needed	1%	Little maintenance required now
Enforce and Publicize Submission Standards	ALL	AS	Needed	<1%	Check with submitters about errors on installation forms

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TASK DESCRIPTION	PERSONNEL	SIARI	FINISH	M-W	CHANGES-SIARIUS
Improve Facilities and Strategies for Testing Software					no work underway due to lack of personpower
Install library_map and friends	Dixon		05/31/76 06/04/76	2 3	Tools finished and ready for installation
Maintain, Improve Library Submission Tests					Nothing underway due to lack of personpower
Change format of news.info to support new help features	Kelley			.2 .2	deferred until time available
Upgrade Installation exec_coms, Install and document					deferred
Honeywell PLM - AN80: Library Maintenance Manual	ALL				deferred
Investigate compare_source_statement program to replace compare_asc11					Compare PL/I source statements, ignoring differences in comments, formatting
Modify updater to give access to libraries before installation and remove afterwards					Low priority