

To: MAB Distribution

From: Richard Holmstedt
Gary Johnson

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Subject: Procedures for Emergency Installations

INTRODUCTION

This bulletin provides the criteria and procedures required for a Multics Emergency Change Request (MECR). MECRs are required to install fixes for critical problems as defined in MAB-044. These include only problems which:

- 1) causes a system to crash,
- 2) irreparably compromises data security or integrity,
- 3) prevents important subsystems from operating, inconveniencing many users.

Where a MECR corrects a problem which exists in a previous Multics Release a critical fix will be transmitted, as appropriate, to affected customer sites. Critical errors have traditionally been identified by customer Trouble Reports, developer testing, or diagnosis of crashes at Development Center (e.g., Phoenix, MIT, ACTC, and CISL) sites.

Problems encountered within two (2) weeks of a normal installation must be corrected by a Post-Submission Bug Fix (PBF) as described in MAB-056, Revision 1, under the Post-Submission Bug Fixes section.

Installations suitable for MECR submission may be installed:

- without an approved MCR
- without an MSCR form
- without full auditing of the code
- without documentation or project approvals

However, once the emergency installation is made, the submitter must resubmit the fix through the normal installation process as defined in MAB-056. This process must be initiated within five working days of the MECR installation.

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PROCEDURE

- 1) **AUTHORIZING INSTALLATION:** When a developer determines that a MECR is required mail should be sent to the Project Leader, Phoenix System Integration Project, describing the nature of the problem and giving the pathnames of segments to be installed. The Project Leader, or Manager of Multics Software Support, determine whether the problem fix actually meets the criteria for a MECR installation. Installation may only begin after MECR approval.

Submit MECRs to System M for any critical problems. Fixes installed at Multics Development Centers (e.g., MIT, ACTC, and CISL) must be forwarded by Multics mail facility to the Project Leader, Phoenix System Integration Project, within one (1) working day for installation on System M and distribution to other Multics Development Centers.

- 2) **MECR:** The Project Leader, or designate, Phoenix System Integration Project, prepares the MECR based on information supplied by the developer's mail. A unique number is assigned to the MECR form to identify the fix and provide for efficient tracking. A sample of the form is shown on the last page of this bulletin.
- 3) **EMERGENCY INSTALLATION:** The Phoenix System Integration Project staff installs the fix. When the fix has been successfully installed the submitter is notified by return Multics mail of the installation. A hard copy of the MECR is sent to the developer by mail.
- 4) **TRACKING:** The Phoenix System Integration Group adds the emergency fix to a tracking data base. The MECR serves as a trigger to make an entry into this data base, which is used to insure that emergency fixes eventually get installed through the normal installation process. The MECR submitter's Unit Manager is responsible for the timely resolution of outstanding MECRs. The most recent list of outstanding MECRs is available to the help command on System M in the mecr.info segment.
- 5) **EMERGENCY INSTALLATION AT DEVELOPMENT CENTERS:** The emergency fix and a copy of the MECR is transmitted to Multics Development Centers after successful installation on System M. The Development Center is responsible for installing the MECR to provide additional exposure.

When the Development Center has installed the MECR mail must be sent to the Project Leader, Phoenix System Integration Group, to allow tracking.

- 6) NORMAL INSTALLATION: Following installation of the MECR the submitter must initiate steps associated with a normal installation as defined in MAB-056, Revision 1. These steps must be initiated within five (5) working days of the MECR installation. The submitter's Unit Manager is responsible for the timely resolution of MECR installations by means of an approved MSCR. Both the MCR and MSCR must reference the MECR number to identify the fix to the MCR Board and the integration staff. Receipt of an approved MCR and a signed-off MSCR causes the MECR to be removed from the tracking data base.

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