Saltzer

Massachusetts Institute of Technology Information Processing Center Cambridge, Massachusetts 02139

MAR 9 1970

To: The Information Processing Advisory Committee

J. H. SALTZER

From: Eleanor River and Dick Steinberg, IPC

Subject: A Proposed Software Support Classification Policy

Date: January 22,1970

This policy statement is an effort to delineate clearly for the community the extent to which the Information Processing Center assumes support responsibility for each of the software items which are available to its users. The approach consists of

1. The definition of those functions which comprise

"software support ".

2. The definition of appropriate levels of support.

3. A precise statement of the degree to which each of the support functions can be provided for each of the

support levels.

4. The assignment of each item to its appropriate support level based on general usefulness, vendor support, availability of maintenance materials, etc. (At present this step has been deferred, pending general acceptance of this policy statement.)

this explication of software The motivation for responsibility is the Center's concern that users become more dependent upon a inadvertantly software item than is warranted by the Center's ability to support it. By declaring explicitly for each such software the Center item the support it feels to be appropriate, hopes to prevent such misunderstandings. The intention is not to restrict the user's scope, but to assist him planning his work-particularly in choosing his software. Clearly the assignment of a particular support level to a specific item is a flexible decision, one that can modified if user demand and resources warrant.

One further word of explanation is necessary. There are both an operating environment and a user interface to that environment. The interface consists of the various software items with which this document concerns itself. These items are the blocks on which the user builds his work. Behind this interface are the hardware and the related control programs (OS/360, CP67, CTSS, and Multics). This document does not concern itself with this part of the system except to caution the user that building a dependency on the operating environment itself is courting trouble.

Type ONE Support

The highest level of support the Center provides is reserved for the processors which are the basic tools of the user and his primary interface to the operating environment. For this software the Center will guarantee dependability (it works), reliability (it doesn't change), and useability (it's easy to get at, well documented and consulting is generally available.

Documentation

The Center will make available, either free or at a nominal charge, all of the necessary documentation including information on the software internals, when possible.

Compatibility

Every effort will be made to maintain compatibility when the operating environment changes. An extensive testing procedure will be followed at these times to assure that this is so. If incompatibilities become unavoidable, adequate notice of the differences will be given.

Error Correction

Every effort will be made to correct (or have corrected) errors discovered. When such errors cannot be corrected the problem will be well publicized and write-arounds documented.

Credit

Performance as documented, with the exception of publicized errors, will be guaranteed and credit will be given for bad runs due to errors in the software or the documentation.

Consulting

Programming assistance will available on a full-time basis in the PAI Office.

Availability

Space for the software will be allocated on systems resident volumes.

Type TWO Support

Type TWO support is provided for the software items which the Center feels enhance the general usefulness of the system and are reasonably manageable. For this software every effort will be made to assure dependability, reliaability and usefulness, but these qualities cannot be guaranteed as in Type ONE.

Documentation

The Center will make available, either free or at a nominal charge, all of the documentation necessary for standard use of the software by a knowledgeable user. Source listings will generally be available for reference.

Compatibility

An effort will be made to assure continuity, but not necessarily full compatibility, of the software as the environment changes. Testing procedures will be followed in this effort though they may not be as extensive or inclusive as Type ONE. If incompatibilities are introduced adequate notice will be given.

Error Correction

Errors will be documented and publicized when discovered. Corrections will be made as time and resources permit.

Credit

Performance as documented, with the exception of publicized errors, will be guaranteed and credit given for bad runs due to errors in the software.

Consulting

Some programming assistance will be available either scheduled in the PAI Office or by appointment.

Availability

Space for the software will be provided on Center volumes.

Type THREE Support

This level of support will be extended primarily to new software items which have not yet been established as generally useful or items of interest to only a small portion of the community. They are still maintained by the Center but consulting and other support may be lacking.

Documentation

The Center will make available, either free or at a nominal charge, all of the documentation necessary for standard use of the software by a knowledgeable user. Source listings will usually be available for reference.

Compatibility

An effort will be made to assure continuity, but at a lower priority than for Types ONE and TWO. Continuity or compatibility of this software will not enter heavily into consideration when contemplating environment changes.

Error Correction

Errors will be documented and publicized when discovered. Corrections will be generated when and if time and resources permit.

Credit

Performance as documented will not be guaranteed unless specifically stated in the documentation.

Consulting

Programming assistance may not be available.

Availability

The software will be made available in machine readable form.

Type FOUR Support

Type FOUR Support is provided to those user-maintained software items that the Center feels are of general enough usefulness. The Center will assume little or no responsibility for the performance of these items. Every effort will be extended to assure their continued availability, however, and their environmental requirements will be considered when contemplating changes.

Documentation

Documentation will generally be provided by the software maintainer.

Compatibility

An effort will be made to assure continuity by maintaining environmental compatibility or giving sufficient notice to the maintainers of incompatibilities in pending changes.

Error Correction ...

Error documentation and correction is a responsibility of the maintainer.

Credit

Performance is not guaranteed by the Center.

Consulting

Programming assistance will not be available from the Center.

Availability

Space will generally be provided by the Center on its volumes.

Type FIVE Support

At this level the Center acts only as a central repository for the software. We will provide storage space and reasonable back up procedures only.