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Identification

The Not-Founder

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Purpose

The basic software path is essentially the path which services calls referencing a given ioname. The role of the Not-Founder (on first mention of an ioname in an attach call) is to initiate establishment of the basic software path. This is elaborated in MSPM BF.2.10, Overview of the Switching Complex, which is a prerequisite for an understanding of this section. The purpose of this section is to describe in detail the internal functioning of the Not-Founder.

Introduction

The Not-Founder (NF) is a special outer module of the I/O system. Since it is part of the mechanism by which the user may replace outer modules, it is difficult and dangerous to attempt replacing it. Further, in its final, debugged version, it is not clear what would be gained by replacing it. In valid usage it is in the path of flow only at attach-time, so efficiency is not a stringent requirement. The outer module replacement mechanism provides for convenient replacement of all the outer modules in the path of substantive I/O. Hence, increased flexibility should not be an issue.

Operational Descriptions

The NF has entry points corresponding to all outer calls. The operation of the NF at all entry points is described in the following two paragraphs. The paragraphs are headed by the names of the covered entry points.

Attach and Noattach Entry Points

The function of the NF at its attach and noattach entry points is to create an Attach Table entry for the ioname specified in the attach call, and forward the attach or noattach call to the IOSW. (For a complete discussion of the Attach Table see MSPM BF.2.13, The Attach Table Maintainer.) The method of obtaining the items whose

source is an argument of the call received by the NF is obvious. Note that the source of all other items is the Type Table. To obtain these items, the NF references the Type Table through the Type Table Maintainer (see MSPM Section BF.2.14).

All Other Entry Points

The action of the NF at all other entry points is as follows.

- 1) If there is an entry for the referenced ioname, a process-level at entry is created for the current process. The attach (or noattach) call is forwarded to the IOSW.
- 2) If there is no entry for the referenced ioname, error status is set, followed by a return.