

PDR RID Report

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Document FOS Design Specification and FOS Database Design and Database Schema Specifications
Section 4.2.1 **Page** 4-12

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| RID ID | PDR | 82 |
| Review | FOS | |
| Originator Ref | MDK1 | |
| Priority | 2 | |

Figure Table Figure 4.2.1-2

Category Name Design **Actionee** HAIS
Sub Category
Subject Dual attached stations vs. dual homed stations

Description of Problem or Suggestion:

If the FOS devices are dual attached stations to the EOC network and they fail, they will wrap the FDDI ring. There is no good way of detecting if a FDDI ring is wrapped from a network manager's point of view. If the Ecom router's FDDI interface fails, then there is a very good possibility that the FDDI network will become two isolated FDDI networks.

Originator's Recommendation

Have the FOS devices dual homed to the two FDDI hubs that are dual attached to the EOC FDDI Operation network. This way if there is a failure with an interface in the FOS device or within the FDDI hub, the dual homed approach will still provide connectivity without affecting the FDDI ring (in terms of wrapping).

GSFC Response by:

GSFC Response Date

HAIS Response by: D. Herring

HAIS Schedule 1/20/95

HAIS R. E. M. Armstrong

HAIS Response Date 1/24/95

The terminology used in this section may have caused some confusion. The EOC Operational Net contains a dual counter-rotating FDDI backbone. This FDDI will be implemented via multiple hubs "chained" together. All hosts on the FDDI (e.g., Real-time Server, Data Server, Data Storage, Ecom Routers, EOC Router) contain dual-attach cards and are dual-homed to separate hubs (using M ports). Thus, complete connectivity will exist even in the event of an entire hub failure. In the event of such a failure, the FDDI ring connecting the hubs together will wrap to "heal" around the dead hub. This will cause no loss of data and will be completely transparent to the FDDI-host applications. The network management agents will be able to detect and enunciate a wrapped FDDI ring.

This RID Response has been discussed with the RID Originator and the issue has been clarified. An updated Figure 4.2.1-2 will be included in the FOS Design Specification.

Status **Closed**

Date Closed **2/1/95**

Sponsor **Johns**

***** **Attachment if any** *****