

Identification

Fault Assignment  
R. M. Graham

Purpose

A number of faults have been reserved for special interpretation by the system. This section lists these faults and describes their interpretation.

Fault Assignments

1. Fault tag 2  
Standard Multics linkage fault; always passed to the linker.
2. Fault tag 3  
(Reserved for future assignment)
3. Master mode entry 1  
(Reserved for future assignment)
4. Master mode entry 2  
(Reserved for future assignment)
5. Master mode entry 3  
(Reserved for future assignment)
6. Master mode entry 4  
(Reserved for future assignment)
7. Illegal procedure, illegal operation code sub-condition  
Used to simulate new instructions not yet retrofitted onto the processor.
8. Illegal procedure, out of bounds sub-condition  
Used by the Basic File System.
9. Illegal procedure, access violation (attempt to execute data) subcondition  
Used to intercept an attempted outward wall crossing; always passed to the gatekeeper.
10. Timer runout  
Transformed into time-out interrupt signal and processes with other interrupts.

11. Connect  
Reserved to mean "clear your associative memory".
12. Directed fault 0  
Used in page and segment descriptors to indicate a missing page or segment.
13. Directed fault 1  
Used for metering core storage usage.
14. Directed fault 2  
Used to intercept an attempted inward wall crossing; always passed to the gatekeeper.
15. Directed fault 3  
Used by the basic file system to deny all access to a page or segment (even to master mode procedures).
16. Directed fault 4  
Used for "unusual mode simulation" i.e., simulation of those file access attributes which have no direct counterpart in segment descriptors.
17. Directed fault 5  
(Reserved for future assignment)
18. Directed fault 6  
(Reserved for future assignment)
19. Directed fault 7  
(Reserved for future assignment)
20. Derail and Fault tag 1  
These faults are reserved for use by users and will not be given special interpretation by the system.