

Identification

Standard Checksum Procedure

check_sum
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Introduction

An implementation of the Multics standard checksum procedure (as described in detail by MSPM BB.6.01) has been created for use by the file system DIM. Its argument list is sufficiently general to make the procedure useful to those outside the DIM.

Usage

Either of the following (equivalent) statements may be used to compute the checksum:

```
    dcl check_sum bit (36) entry external;  
        sum = check_sum (ptr, count);
```

or

```
    call check_sum (ptr, count, sum);
```

where:

```
    dcl ptr pointer,  
        count fixed binary (18),  
        sum bit (36);
```

Although not implied by the declare, "sum" need not be aligned; that is, it may be part of a structure.

Effect

The full-word checksum described in MSPM BB.6.01 is computed on the "count" words starting at the location pointed to by "ptr". The resulting checksum is stashed in "sum". In the case that "count" is zero, "sum" is set zero.