

Display the N^{th} entry of a directory (DR:DSPN in OPERCL)

Parameters:

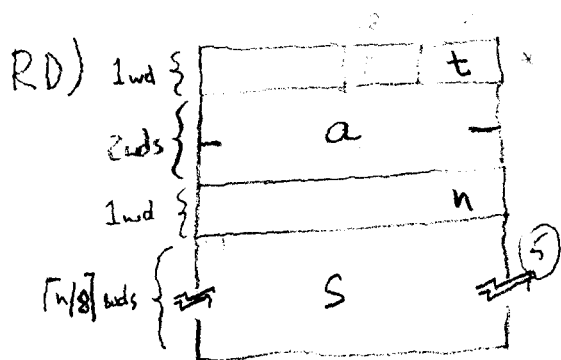
IP1) C: A directory

IP2) D: A positive integer, $[(2,0) \text{ error if } IP2 \leq 0]$

Action:

If the directory contains fewer than IP2 entries, FRETURN.
 Otherwise, information describing the IP2th entry is returned in the format shown below:

Returns:

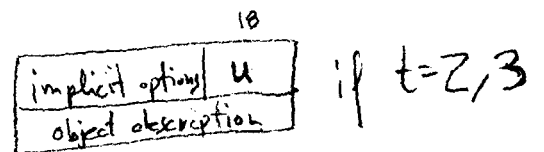
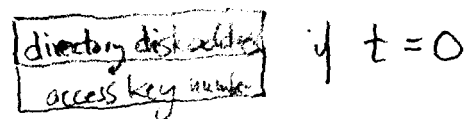


where $t = \text{entry type} = \begin{cases} 0 \equiv \text{softlink} \\ 2 \equiv \text{hardlink} \\ 3 \equiv \text{ownership} \end{cases}$

$n = \text{character count}, 1 \leq n \leq 40^*$

$s = \text{a character string of length } n, \text{ left justified in the rightmost 56 bits of each word. [Left most 4 bits=0.]$

$a = \text{additional information:}$



where $u = 0, 1, 2, \dots, 5$ specifies File, directory, ..., access-key

(* the number 40 is an assembly parameter of the directory system)

Display a Directory Entry

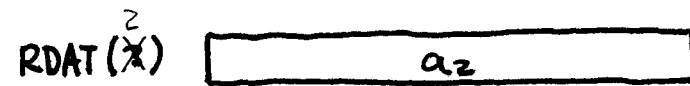
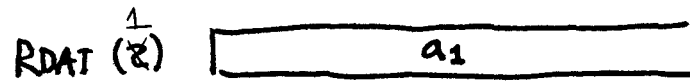
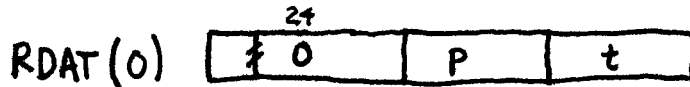
(DR:DSPE)

Input parameters:

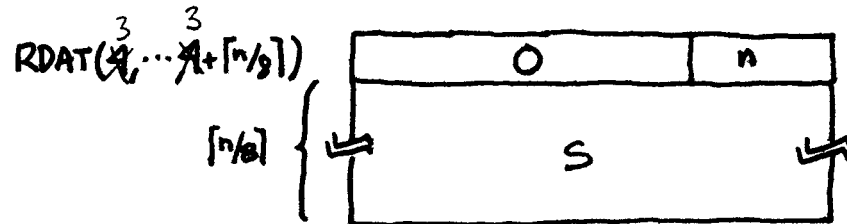
IP1 C: A directory

IP2 BD: A name

Return parameters:



and, if t=0,



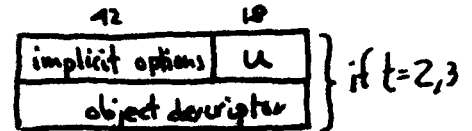
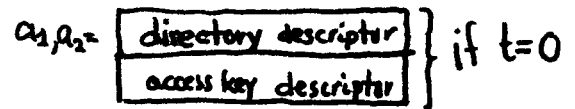
n = character count, 1 ≤ n ≤ 40

S = a character string of length n, LJZF in the rightmost 8 bits of each word [leftmost 4 bits = 0].

S = softlink name

p = number of access pairs this entry

t = entry type = $\begin{cases} 0 & \text{if softlink} \\ 2 & \text{if hardlink} \\ 3 & \text{if ownership} \end{cases}$



and u = $\begin{cases} 0 & \text{if file} \\ 1 & \text{if directory} \\ 2 & \text{if subprocess descr.} \\ 3 & \text{if static name tag} \\ 4 & \text{if dynamic name tag} \\ 5 & \text{if access key} \end{cases}$

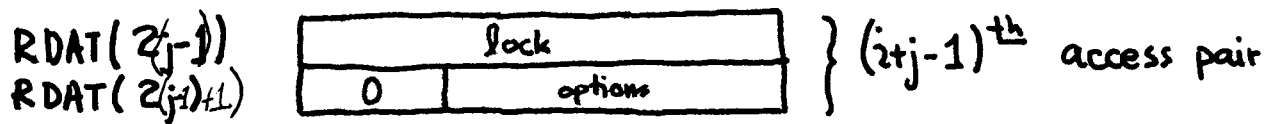
Display Directory Entry Access Pairs

(DR: DAP)

Input parameters:

- IP1 C: A directory
- IP2 BD: An entry name
- IP3 D: An integer i , $i \geq 1$
- IP4 D: An integer n , $n \geq 1$

Return parameters:



$$j = 1, 2, \dots, \min(n, k)$$

where k is an assembly parameter.

Action:

The i^{th} through the $(i+n-1)^{\text{th}}$ access pairs of the given directory entry are returned as shown. The action never FRETURNS; if $(i+n-1)$ is greater than the total number of pairs, as many as are present (but never more than k) are returned.

Display Directory Successor Pointer

(DR: DSFS)

Input parameter:

IP1 C: A directory

Return parameters:

RDAT(0)	0	options
RDAT(1)	directory descriptor	

Action:

If the directory IP1 has no successor pointer, this action FRETURNS.
Otherwise, two words are returned as shown above.