

Interlisp-D fixed allocations: conversion to Intermezzo

(all numbers in octal)

Name	Old Size (pages)	Old Addr	New Size	New Addr	Old Real	New Real
<i>On page 26:</i>						
Interface Page	1	26,10000	1	6,0	3	3
Primary Page Map	2	26,0	10	6,1000	2153	3313
StatsSpace (unused)	2	26,120000	omit			
Interrupt Table (unused)	?	26,121200	omit			
MiscStats	2 (1 used)	26,122000	2	6,5000		
UFN Table	2	26,123000	2	6,6000		
DTD ****	20	26,124000	20 (140)	6,10000		
MDS Type Table	40	26,100000	1/2 seg	6,100000	1600	2400
FPTOVP	1/4 seg	26,40000	1 seg	4,0	501	2000
<i>Misc:</i>						
Secondary Page Map	1/4 seg	25,0	1 seg	5,0		
Stack	1 seg	27,0	1 seg	1,0	1000	1400
GC Hash table	1/2 seg	73,0	1/2 seg	20,0	1400	2600
GC Collision *	1 seg	74,0	1 seg	21,0		
GC Overflow **	1	73,100000	1	20,100000	1640	3000
GC Big Ref	1-?	73,100400	1-?	20,100400		
Display Bitmap	312	76,0	312	22,0	1641	3001
LockedPageTable	—	(26,20000)	20	6,70000		
Map (Dlion only)	100	—	400	—	400	400
IOPage (Dlion only)	1	0,177400	1	0,177400	500	1000
SmallPosP's	1 seg	16,0	1 seg	16,0		
SmallNegs	1 seg	17,0	1 seg	17,0		
Arrayspace Start		40,0		23,0		
<i>Atoms:</i> (if 64K atoms)						
Pname Pointers	1 seg	20,0	2 seg	10,0		
Definitions	1 seg	21,0	2 seg	12,0		
Topvals	1 seg	22,0	2 seg	14,0		
Property Lists	1 seg	23,0	2 seg	2,0		
Atom Hash Table	1/2 seg	24,0	1 seg	7,0		
Pname Chars ***	8 seg	30,0	6 seg	72,0		

* Collision table occupies 1 segment, all preallocated, for no particularly good reason. It wants to be big, because once it fills up, you have to disable gc. I have seen the table get as large as a quarter segment. Current algorithms prevent it from being larger than one segment, but it would be easy to make it 2 segments long.

** GC Overflow table is actually just a few words. Current microcode relies on it being in the same segment as GC Hash, but this is not very important.

*** Pname char space is currently far too large for 32K litatoms; it might be about right for 64K, but we plan to dispose of it when pnames are hunked (taken as allocblocks), leaving just enough to get thru MAKEINIT.

**** Want to allow a little extra space for DTD in case we expand number of datatypes. This layout allows us to expand from 256 datatypes (8 bits) to 1536 datatypes (11 bits) before bumping into the LockedPageTable.

Further notes, June 1986 (post-Koto):

Pname char space now gone—all pnames are allocated from hunks.

Atom Hash Table address range used also for cml Character type (an immediate). With packages, atom hash table will go away eventually.