

DavisBase

Nano

Use Case

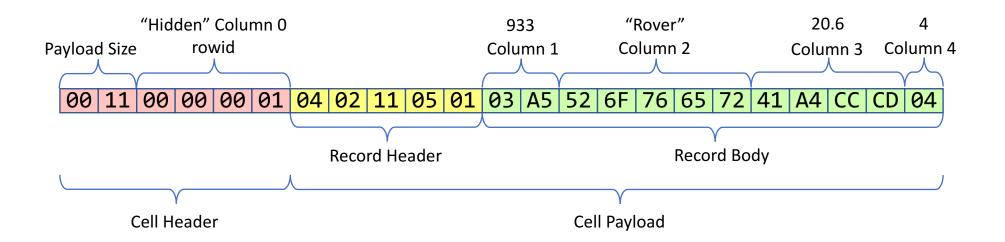
- Suppose we want to create a database table of individual dogs
- We have information about several dogs that is in a tabular format

Tag ID	Name	Weight (kg)	Age (years)
933	Rover	20.6	4
8326	Spot	10.8	7
5359	Lucky	31.2	5
10355	Dinky	4.8	11
7757	Bruiser	42.0	6
3597	Patch	29.6	9
202	Prince	16.6	7
1630	Bubbles	7.1	1
11223	Peanut	14.3	2

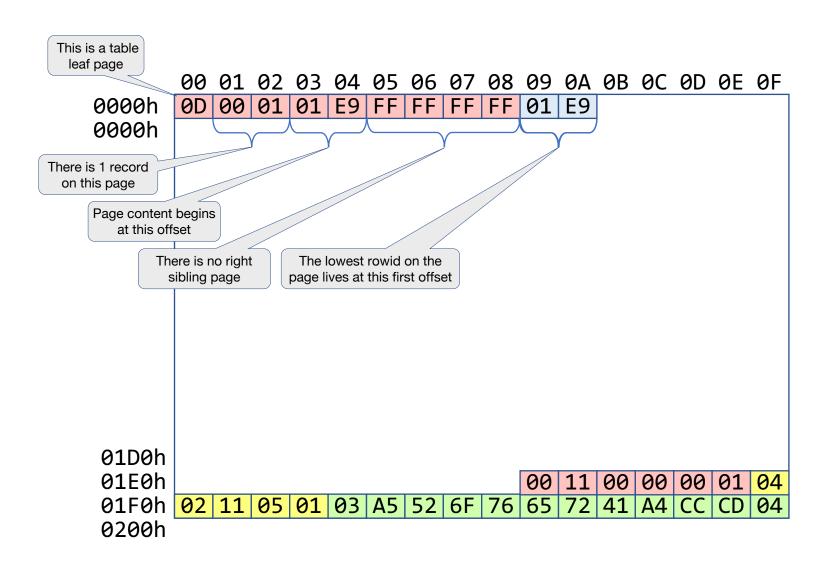
Database of Dogs

Tag ID	Name	Weight (kg)	Age (years)
933	Rover	20.6	4
8326	Spot	10.8	7
5359	Lucky	31.2	5
10355	Dinky	4.8	11
7757	Bruiser	42.0	6
3597	Patch	29.6	9
202	Prince	16.6	7
1630	Bubbles	7.1	1
11223	Peanut	14.3	2

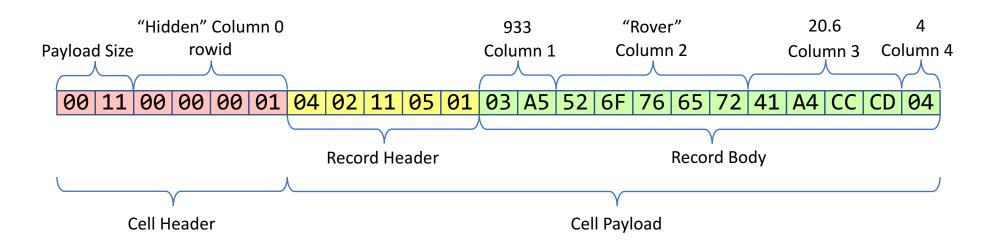
First Record Format Insert



How The Record Is Stored In A Table Leaf Page

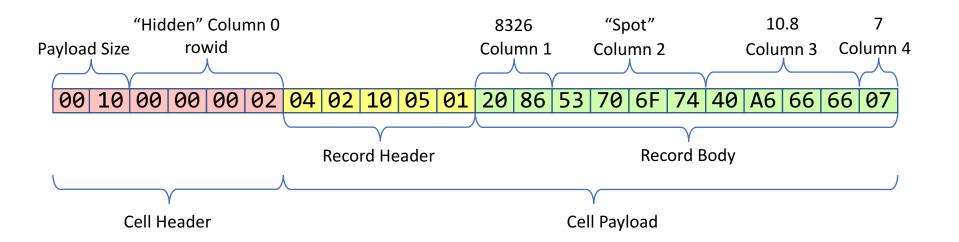


Insert First Record

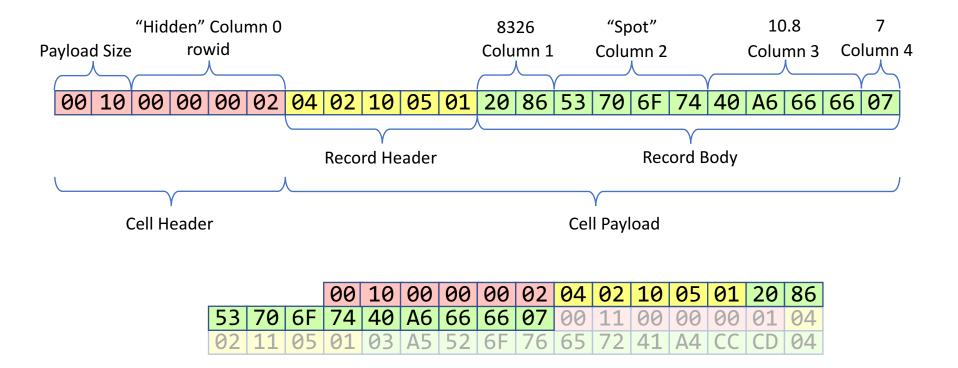


 02
 11
 05
 01
 03
 A5
 52
 6F
 76
 65
 72
 41
 A4
 CC
 CD
 04

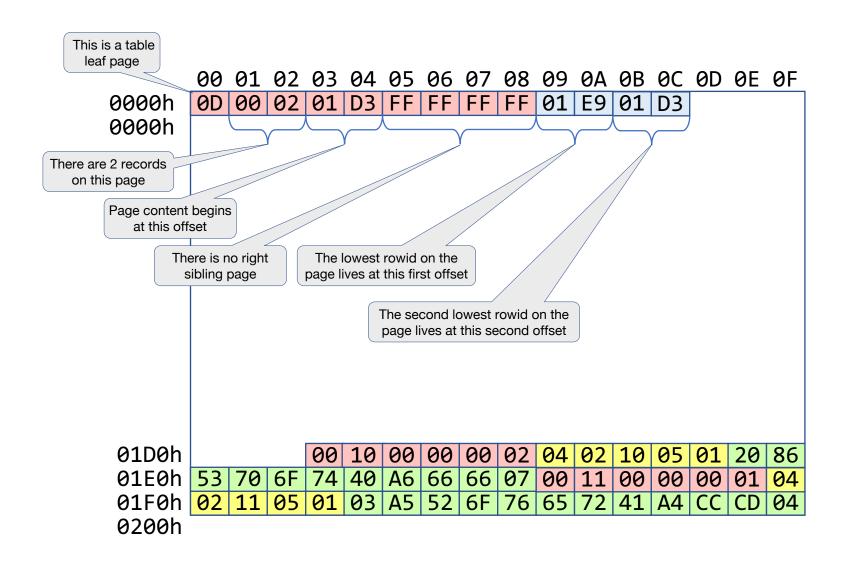
Second Record Format Insert



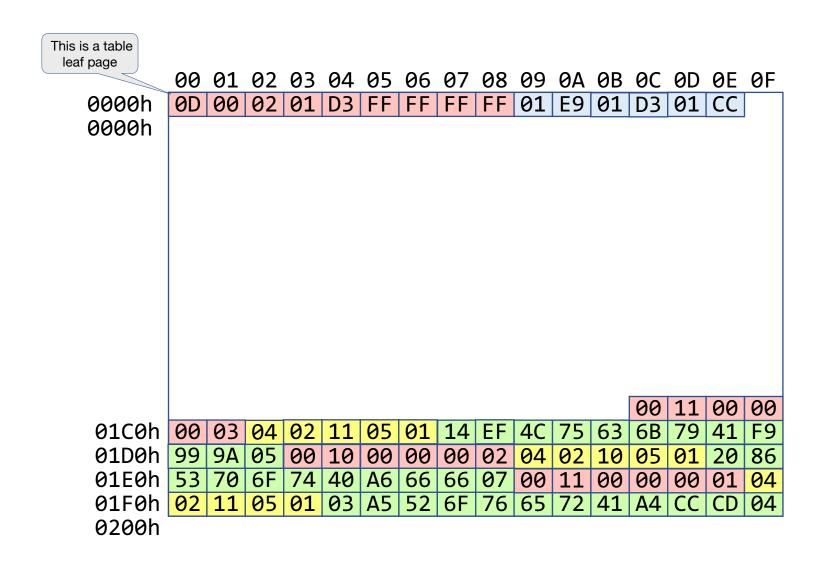
Insert



How The Second Record Is Stored In A Table Leaf Page

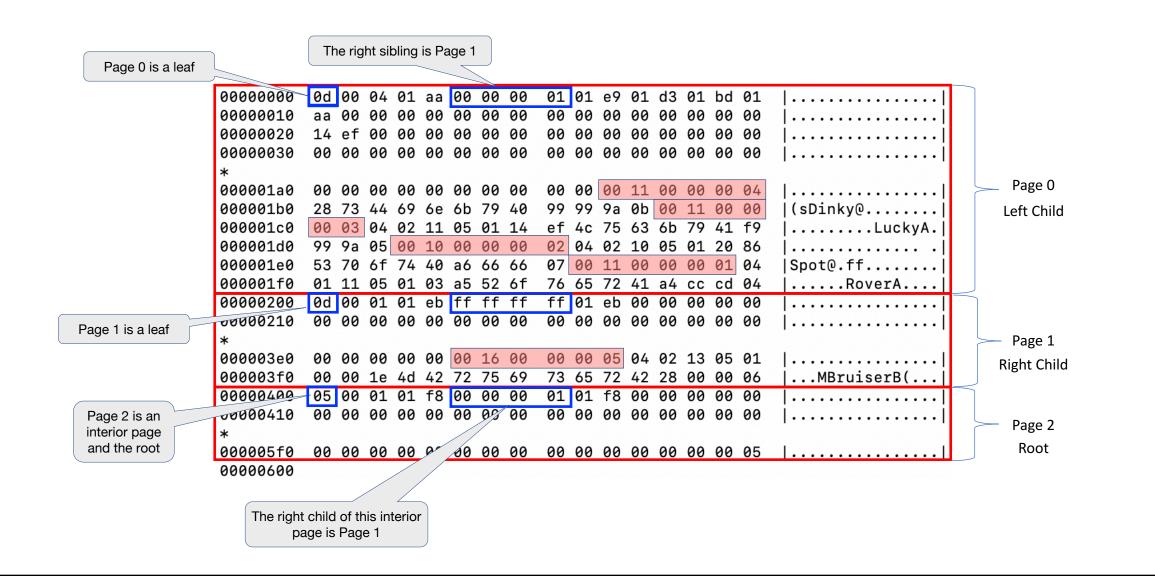


How The Third Record Is Stored In A Table Leaf Page



```
00000000
         0d 00 04 01 aa ff ff ff ff 01 e9 01 d3 01 bd 01
00000010
         aa 00 00 00 00 00 00 00
                                  00 00 00 00 00 00 00 00
00000020
         14 ef 00 00 00 00 00 00
                                  00 00 00 00 00 00 00 00
00000030
         00 00 00 00 00 00 00 00
                                  00 00 00 00 00 00 00 00
000001a0
         00 00 00 00 00 00 00 00
                                 00 00 00 11 00 00 00 04
000001b0
         28 73 44 69 6e 6b 79 40
                                  99 99 9a 0b 00 11 00 00
                                                           |(sDinky@.....
         00 03 04 02 11 05 01 14 ef 4c 75 63 6b 79 41 f9
000001c0
                                                           |....LuckyA.
         99 9a 05 00 10 00 00 00 02 04 02 10 05 01 20 86
000001d0
                                                           |..............
000001e0
         53 70 6f 74 40 a6 66 66 07 00 11 00 00 00 01 04
                                                           |Spot@.ff....
000001f0
         01 11 05 01 03 a5 52 6f 76 65 72 41 a4 cc cd 04
                                                           |....RoverA....|
00000200
```

Record Insert: Table Page Overflow



```
0d 00 04 01 aa 00 00 00 01 01 e9 01 d3 01 bd 01
00000000
                                                             | . . . . . . . . . . . . . . . . .
00000010
         aa 00 00 00 00 00 00 00
                                   00 00 00 00 00 00 00
00000020
         14 ef 00 00 00 00 00 00
                                   00 00 00 00 00 00 00
00000030
         00 00 00 00 00 00 00
                                   00 00 00 00 00 00 00
000001a0
          00 00 00 00 00 00 00
                                   00 00 00 11 00 00 00 04
                                                             . . . . . . . . . . . . . . . .
000001b0
         28 73 44 69 6e 6b 79 40 99 99 9a 0b 00 11 00 00
                                                             |(sDinky@.....
         00 03 04 02 11 05 01 14 ef 4c 75 63 6b 79 41 f9
                                                             ....LuckvA.
000001c0
000001d0
         99 9a 05 00 10 00 00 00 02 04 02 10 05 01 20 86
                                                             . . . . . . . . . . . . . . .
000001e0
         53 70 6f 74 40 a6 66 66 07 00 11 00 00 00 01 04
                                                             |Spot@.ff.....
000001f0
         01 11 05 01 03 a5 52 6f 76 65 72 41 a4 cc cd 04
                                                             .....RoverA....
00000200
         0d 00 01 01 eb ff ff ff ff 01 eb 00 00 00 00 00
00000210
         00 00 00 00 00 00 00
                                  00 00 00 00 00 00 00
                                                              . . . . . . . . . . . . . . . .
000003e0
          00 00 00 00 00 00 16 00
                                   00 00 05 04 02 13 05 01
                                                             . . . . . . . . . . . . . . . .
000003f0
         00 00 1e 4d 42 72 75 69 73 65 72 42 28 00 00 06
                                                             ...MBruiserB(...
                                                             . . . . . . . . . . . . . . . .
00000400
          05 00 01 01 f8 00 00 00
                                   01 01 f8 00 00 00 00 00
00000410
         00 00 00 00 00 00 00
                                   00 00 00 00 00 00 00
000005f0
          00000600
```