

DavisBase

Nano

Use Case

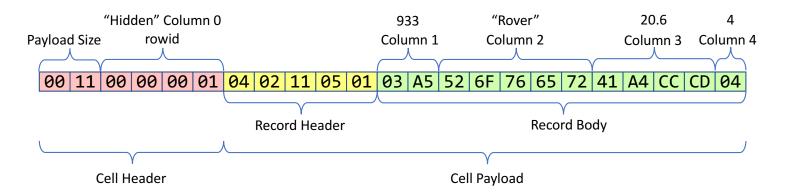
- Suppose we want to create a database table of individual dogs
- We have information about several dogs that is in a tabular format

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		

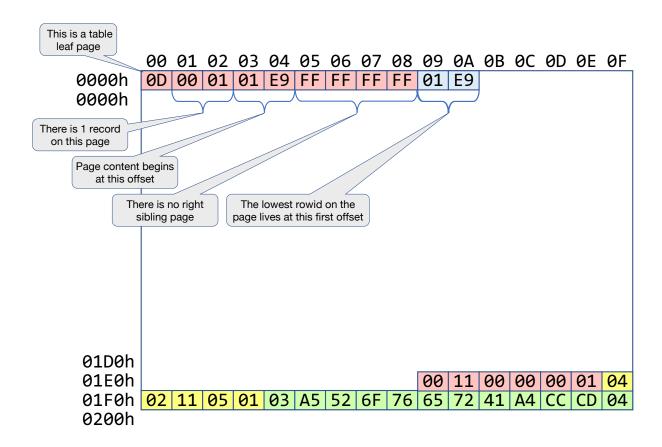
Database of Dogs

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		
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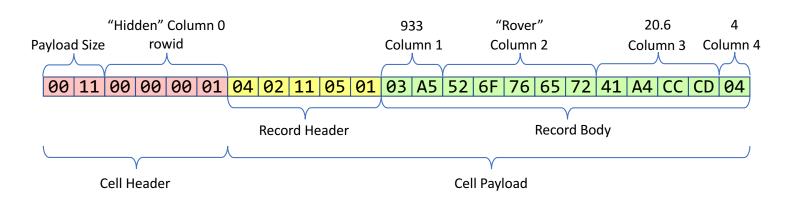
First Record Format Insert



How The Record Is Stored In A Table Leaf Page

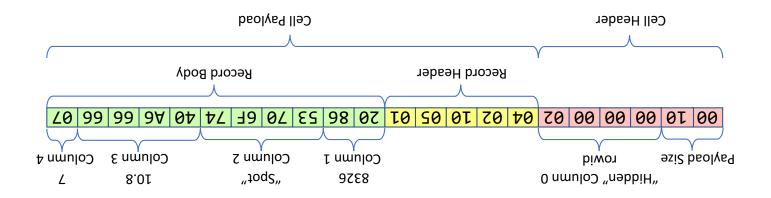


Insert First Record

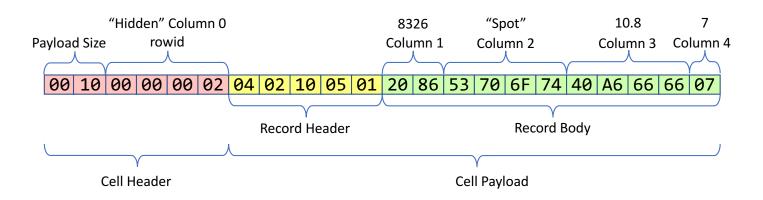


00 11 00 00 01 04 02 11 05 01 03 A5 52 6F 76 65 72 41 A4 CC CD 04

Second Record Format Insert

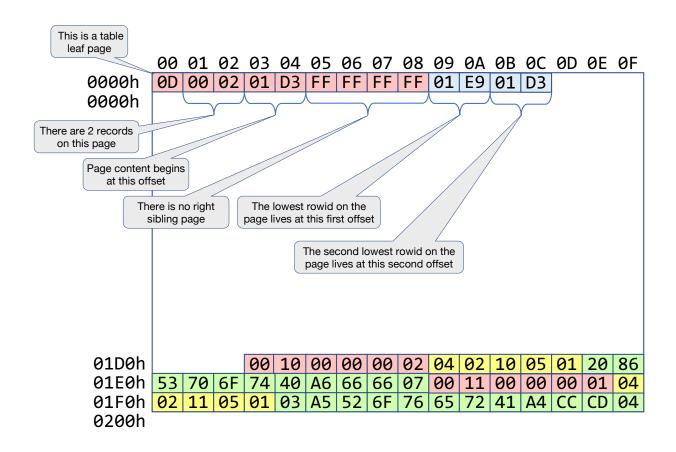


Insert

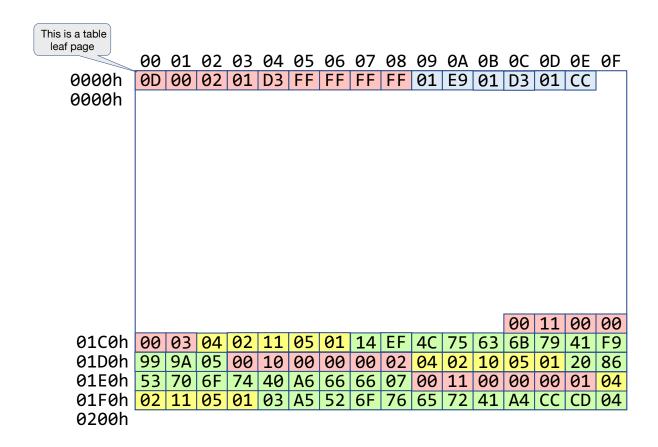


			00	10	00	00	00	02	04	02	10	05	01	20	86
53	70	6F	74	40	A6	66	66	07	00	11	00	00	00	01	04
02	11	05	01	03	A5	52	6F	76	65	72	41	Α4	CC	CD	04

How The Second Record Is Stored In A Table Leaf Page

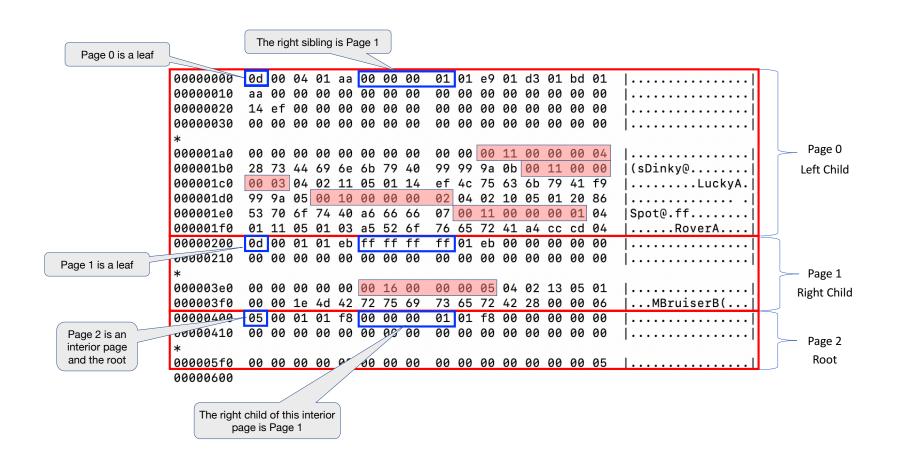


How The Second Record Is Stored In A Table Leaf Page



```
00000000
          0d 00 04 01 aa ff ff ff ff 01 e9 01 d3 01 bd 01
                                   00 00 00 00 00 00 00 00
         aa 00 00 00 00 00 00 00
00000010
00000020
          14 ef 00 00 00 00 00 00
                                   00 00 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 11 00 00 00 04
000001a0
          00 00 00 00 00 00 00 00
                                                               . . . . . . . . . . . . . . . . . .
          28 73 44 69 6e 6b 79 40 99 99 9a 0b 00 11 00 00
000001b0
                                                              |(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



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