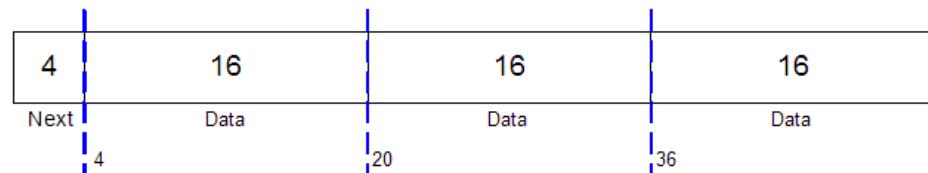


**Example 1:** 16-byte data, no padding, no header blocks, no alignment.

Field	Size
Next pointer	4 bytes
Padding	0 bytes (not used)
Header block	0 bytes (not used)
Data	16 bytes
Alignment	0/0 bytes (not used)
Page size	52 bytes



Memory dump (wrapped at 32 bytes):

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
00	00	00	00	00	00	00	00	AA	B4	3D	33	00	AA																				
AA	AA	AA	AA	C4	3D	33	00	AA																									

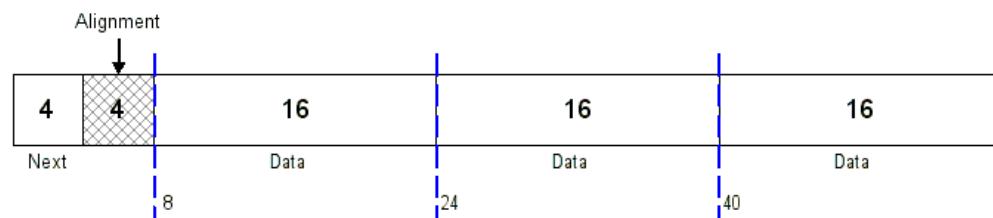
Wrapped at 16 bytes:

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
00	00	00	00	00	00	00	00	AA							
AA	AA	AA	AA	B4	3D	33	00	AA							
AA	AA	AA	AA	C4	3D	33	00	AA							
AA	AA	AA	AA												

Note, however, that the data will naturally be aligned on 4-byte boundaries, due to the size of the data.

**Example 2:** 16-byte data, no padding, no header blocks, 8-byte alignment.

Field	Size
Next pointer	4 bytes
Padding	0 bytes (not used)
Header block	0 bytes (not used)
Data	16 bytes
Alignment	4/0 bytes (left/interblock)
Page size	56 bytes



Memory dump (wrapped at 32 bytes):

```

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
00 00 00 00 EE EE EE 00 00 00 00 AA AA
AA AA AA AA AA AA AA AA C8 3D 33 00 AA AA

```

Wrapped at 16 bytes:

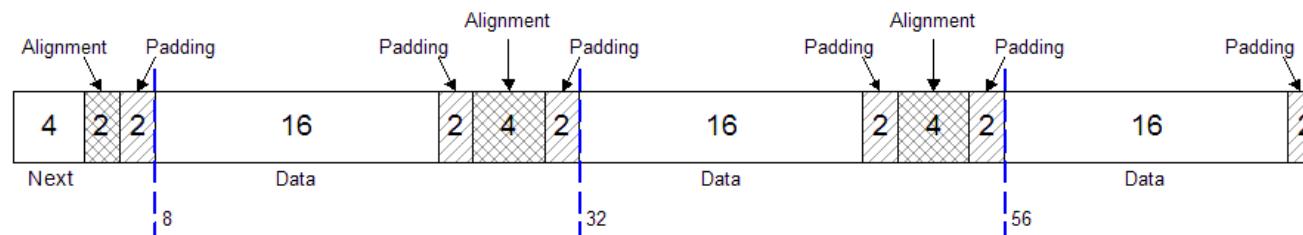
```

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
00 00 00 00 EE EE EE 00 00 00 00 AA AA AA AA
AA AA AA AA AA AA AA B8 3D 33 00 AA AA AA AA
AA AA AA AA AA AA AA C8 3D 33 00 AA AA AA AA
AA AA AA AA AA AA AA AA

```

**Example 3:** 16-byte data, 2-byte padding (left/right), no header blocks, 8-byte alignment.

Field	Size
Next pointer	4 bytes
Padding	2 bytes
Header block	0 bytes (not used)
Data	16 bytes
Alignment	2/4 bytes (left/interblock)
Page size	74 bytes



Memory dump (wrapped at 32 bytes):

```

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
00 00 00 00 EE EE DD DD 00 00 00 00 AA DD DD EE EE DD DD B8 3D 33 00
B8 3D 33 00 AA AA
AA AA AA AA AA AA AA AA DD DD DD EE EE EE DD DD D0 3D 33 00 AA AA
AA AA AA AA AA AA AA AA DD DD

```

Wrapped at 16 bytes:

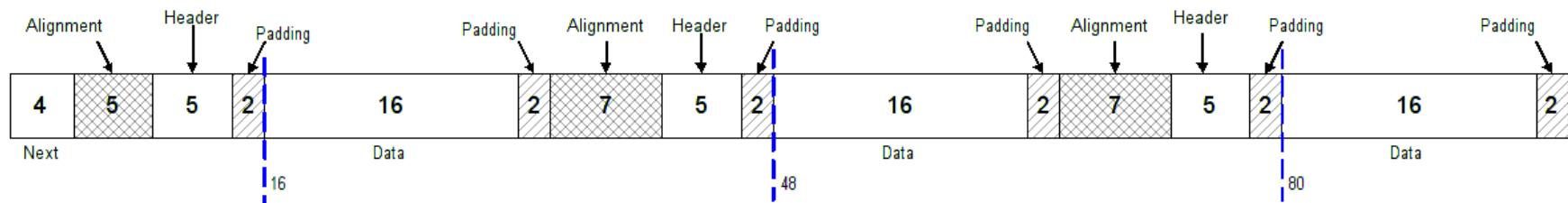
```

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
00 00 00 00 EE EE DD DD 00 00 00 00 AA AA AA AA
AA AA AA AA AA AA AA AA AA AA AA AA AA AA AA AA
B8 3D 33 00 AA AA
DD DD EE EE EE DD DD D0 3D 33 00 AA AA AA AA
AA AA AA AA AA AA AA AA DD DD

```

**Example 4:** 16-byte data, 2-byte padding (left/right), basic header blocks (5 bytes), 16-byte alignment.

Field	Size
Next pointer	4 bytes
Padding	2 bytes
Basic header block	5 bytes
Data	16 bytes
Alignment	5/7 bytes (left/interblock)
Page size	98 bytes



Memory dump (wrapped at 32 bytes):

```

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
00 00 00 00 EE EE EE EE 00 00 00 00 00 DD DD 00 00 00 00 AA AA
DD DD EE EE EE EE EE 00 00 00 00 00 DD DD C0 3D 33 00 AA AA
DD DD EE EE EE EE EE 00 00 00 00 00 DD DD E0 3D 33 00 AA AA
DD DD

```

Wrapped at 16 bytes:

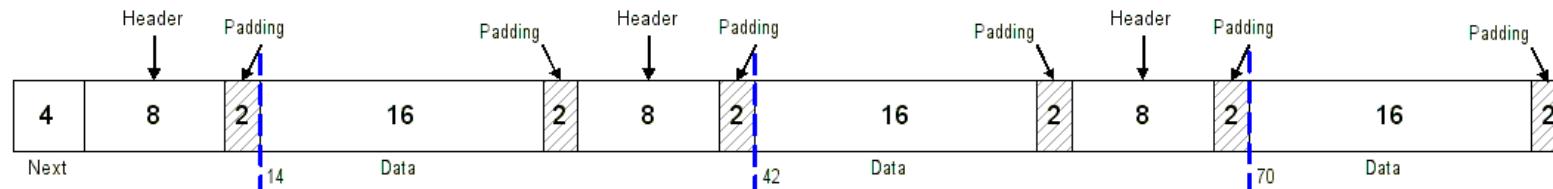
```

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
00 00 00 00 EE EE EE EE 00 00 00 00 DD DD
00 00 00 00 AA AA
DD DD EE EE EE EE EE 00 00 00 00 DD DD
C0 3D 33 00 AA AA
DD DD EE EE EE EE EE 00 00 00 00 DD DD
E0 3D 33 00 AA AA
DD DD

```

**Example 5:** 16-byte data, 2-byte padding (left/right), extended header blocks with 1 additional byte (8 bytes), no alignment.

Field	Size
Next pointer	4 bytes
Padding	2 bytes
Extended header block	8 bytes
Data	16 bytes
Alignment	0/0 no alignment
Page size	88 bytes



Memory dump (wrapped at 32 bytes):

```

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
00 00 00 00 00 00 00 00 00 00 00 00 DD DD 00 00 00 00 AA DD DD
00 00 00 00 00 00 00 00 00 00 DD DD 8E 4D 33 00 AA DD DD 00 00 00 00
00 00 00 00 DD DD AA 4D 33 00 AA DD DD

```

Wrapped at 16 bytes:

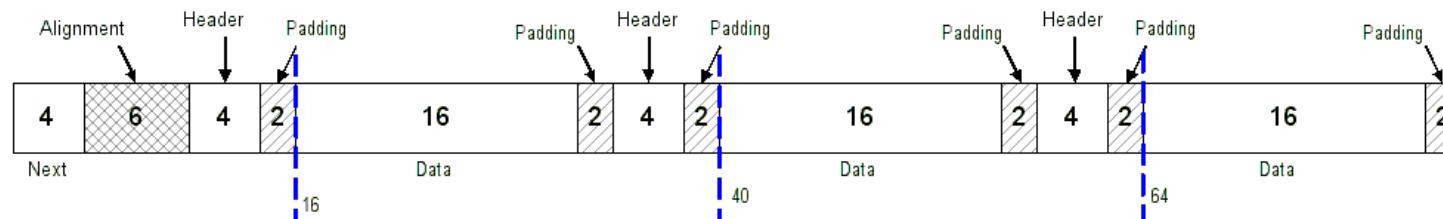
```

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
00 00 00 00 00 00 00 00 00 00 00 00 DD DD 00 00
00 00 AA DD DD
00 00 00 00 00 00 00 00 DD DD 8E 4D 33 00 AA AA
AA AA AA AA AA AA AA AA AA AA AA DD DD 00 00 00 00
00 00 00 00 DD DD AA 4D 33 00 AA AA AA AA AA AA
AA AA AA AA AA DD DD

```

**Example 6:** 16-byte data, 2-byte padding (left/right), external header blocks (4 bytes, 32-bit), 8-byte alignment.

Field	Size
Next pointer	4 bytes
Padding	2 bytes
External header block	4 bytes
Data	16 bytes
Alignment	6/0 alignment
Page size	82 bytes



Memory dump (wrapped at 32 bytes):

```

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
00 00 00 00 EE EE EE EE EE 00 00 00 00 DD DD 00 00 00 00 AA AA
DD DD 00 00 00 00 DD DD 90 4D 33 00 AA DD DD 00 00 00 00 DD DD
A8 4D 33 00 AA DD DD 00 00 00 00 DD DD

```

Wrapped at 16 bytes:

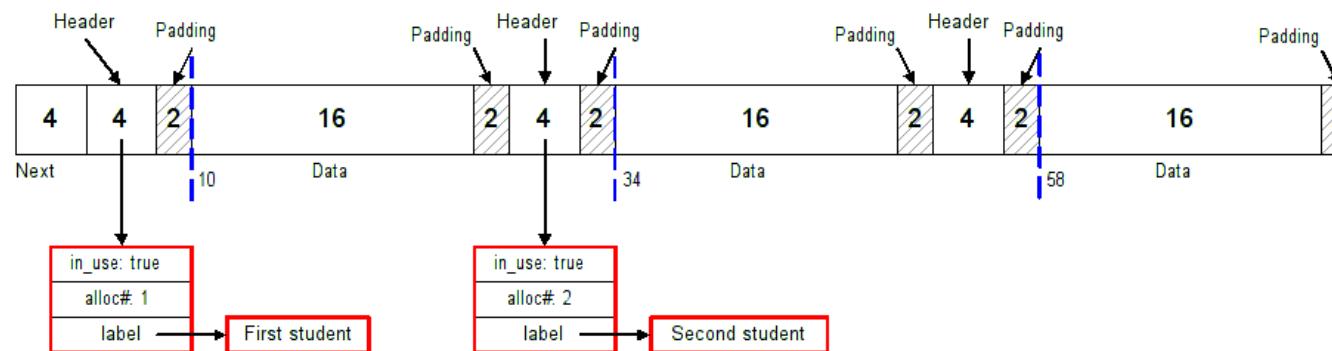
```

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
00 00 00 00 EE EE EE EE EE 00 00 00 00 DD DD
00 00 00 00 AA AA
DD DD 00 00 00 00 DD DD 90 4D 33 00 AA AA AA AA
AA AA AA AA AA AA AA DD DD 00 00 00 00 DD DD
A8 4D 33 00 AA AA
DD DD

```

**Example 7:** 16-byte data, 2-byte padding (left/right), external header blocks (4 bytes, 32-bit) showing the dynamically-allocated structs and dynamically-allocated strings, no alignment, assuming 32-bit computer.

Field	Size
Next pointer	4 bytes
Padding	2 bytes
External header block	4 bytes
Data	16 bytes
Alignment	no alignment
Page size	76 bytes



Memory dump (wrapped at 32 bytes):

```

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
00 00 00 00 40 4E 33 00 DD DD BB DD DD 00 00 00 00 DD DD CC CC CC CC
DD DD BB DD DD 00 00 00 00 DD DD CC CC CC CC DD DD
CC CC CC CC CC CC CC CC CC DD DD

```

Wrapped at 16 bytes:

```

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
00 00 00 00 40 4E 33 00 DD DD BB BB BB BB BB
BB BB BB BB BB BB BB BB DD DD B8 4E 33 00
DD DD BB BB
BB BB DD DD 00 00 00 00 DD DD CC CC CC CC CC
CC CC CC CC CC CC CC CC DD DD

```

The diagram above is the result of allocating all 3 blocks, then freeing the right-most block. The signatures reflect this fact.