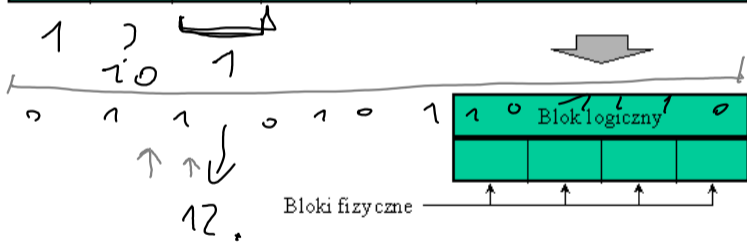
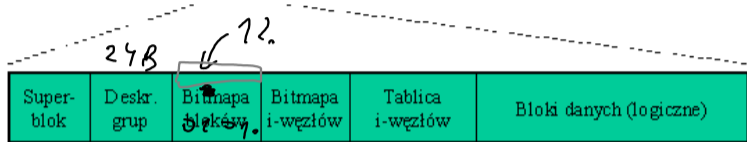




1B3



17024B

A) X

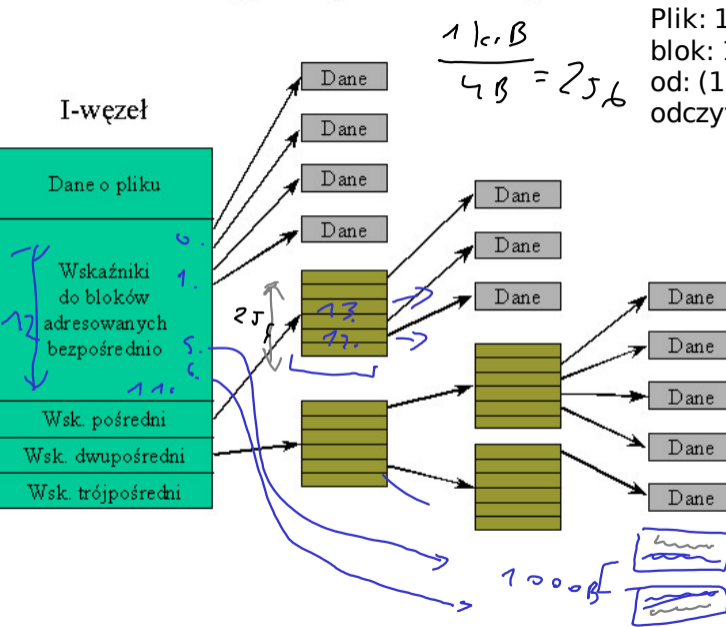
B) X

C) X

$$27B \cdot 400 = 10800B \rightarrow 10 \text{ wlotów}$$



# Dostęp do pliku w ext2



$\frac{1 \text{ KiB}}{4 \text{ B}} = 256$

Plik: 15000B  
 blok: 1KiB  
 od: (1) 6000, (2) 14000  
 odczyt / zapis: 1000B

(1 1 1)

Odczyt:  
 6000: 5, 6.  
 14000: 20  
 13, 14.  
20 + 10 = 30

Zapis:  
 6000: 2z + 20 = 4  
 14000: 30 + 2z = 5

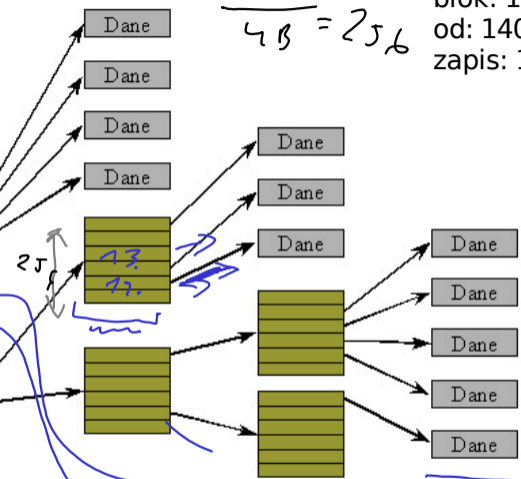
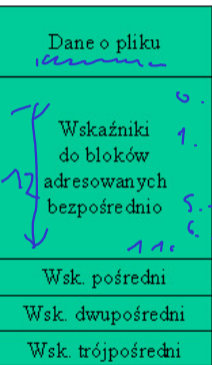
1000B [ 5 - 1 1 3.  
 6 - 1 1 4.

# Dostęp do pliku w ext2

Plik: 14000B  
 blok: 1KiB  
 od: 14000  
 zapis: 1000B

1001

I-węzeł



$$\frac{1 \text{ KiB}}{4 \text{ B}} = 256$$

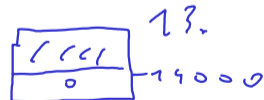
14000:

$$10 + 10 + 12 + 12 + 8$$

13. 13. 11

$$+ 12 = 5$$

10

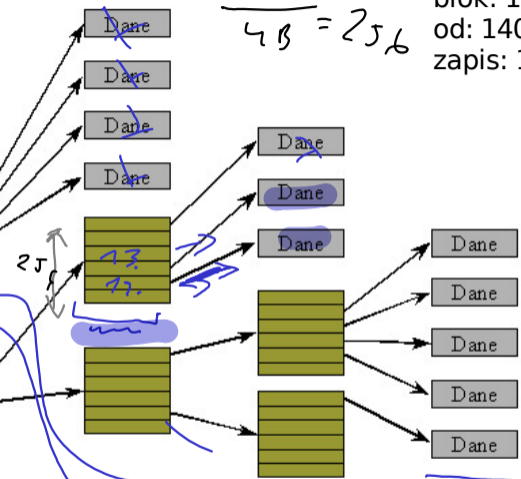
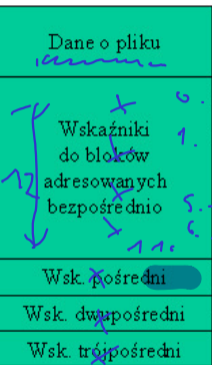


# Dostęp do pliku w ext2

Plik: 0B  
 blok: 1KiB  
 od: 14000  
 zapis: 1000B

1 C 1

I-węzeł



$$\frac{1 \text{ KiB}}{4 \text{ B}} = 256$$

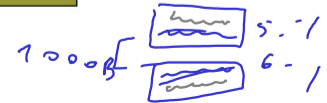
lseek()

„plik dziurawy”

$$1_2 + 1_2 + 1_2 = 3$$

13      14: =

15 0 0 0 B



1103

blok	max. plik	max. partycja
1 KiB = $2^{10}$	$2^{34} = 16 \text{ GiB}$	$2^{42} = 4 \text{ TiB}$
8 KiB = $2^{13}$	$2^{41} = 2 \text{ TiB}$	$2^{45} = 32 \text{ TiB}$

Max. plik:

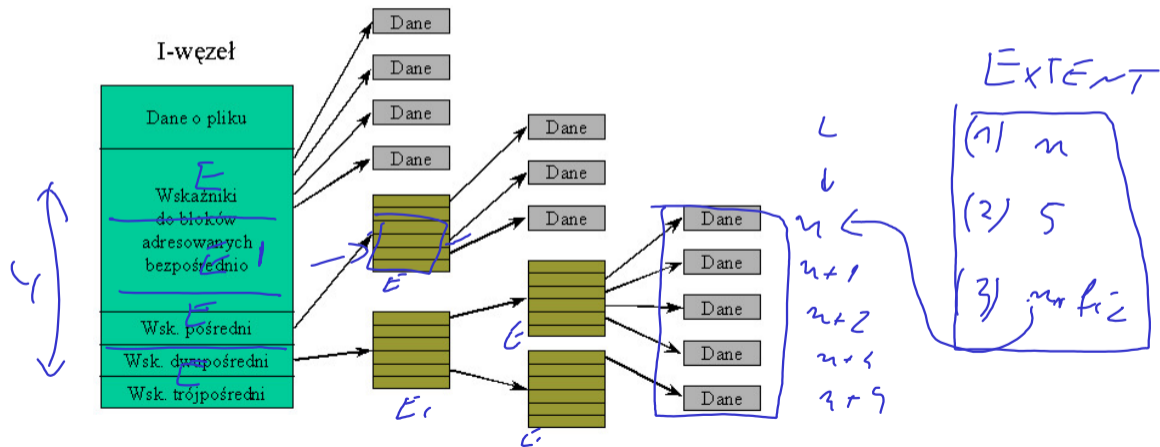
$$\min\left(\frac{12 + (b/4) + (b/4)^2 + (b/4)^3}{b}, \frac{2^{32} * 2^9}{2^{41}}\right)$$

Max. partycja:

$$2^{32} * b$$

# EXTS

## Dostęp do pliku w *ext2fs*



10?

blok	max. plik	max. partycja
1 KiB = $2^{10}$	$2^{42} = 4 \text{ T, B}$	$2^{58} = 256 \text{ P, B}$
8 KiB = $2^{13}$	$2^{45} = 32 \text{ T, B}$	$2^{61} = 2 \text{ E, B}$

Max. plik:

$$2^{32} * b \leftarrow \text{nr logiczne}$$

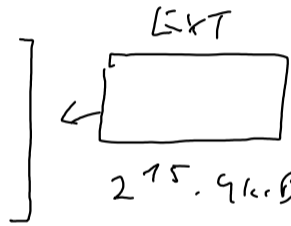
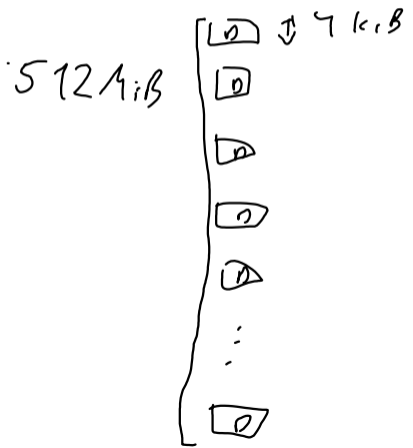
Max. partycja:

$$2^{48} * b \leftarrow \text{nr fizyczne}$$

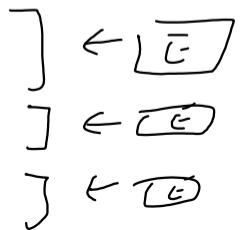


# EXT4

102



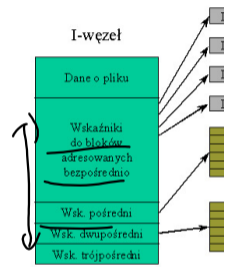
$$2^{15} \cdot 4 \text{ k.B} = 128 \text{ MiB}$$



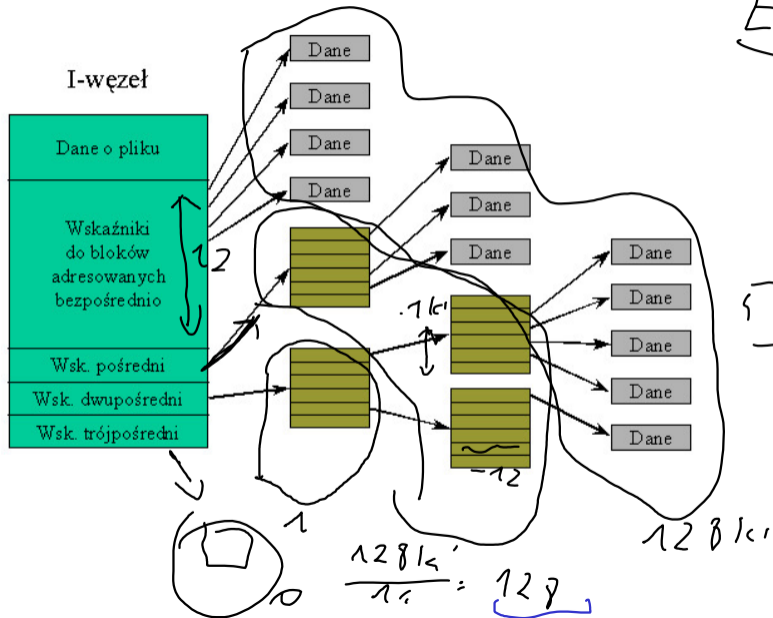
4 extenły



Dostęp do



# Dostęp do pliku w *ext2fs*



EXT3      102

$$\frac{4 \text{ k} \cdot 3}{4 \text{ B}} = 1 \text{ k}$$

$$\frac{5 \cdot 12 \text{ k} \cdot 3}{4 \text{ k} \cdot 3} = 128 \text{ k}'$$

$$128 + 1 = 129$$