

# Middleware – Cloud Computing

Verwaltung großer Datenmengen (Zusatz)

Welche der Konstellationen sind im Google File System möglich?

---

Wintersemester 2023/24

Tobias Distler

Friedrich-Alexander-Universität Erlangen-Nürnberg  
Lehrstuhl Informatik 4 (Verteilte Systeme und Betriebssysteme)  
Lehrstuhl Informatik 16 (Systemsoftware)






Lehrstuhl für Verteilte Systeme  
und Betriebssysteme

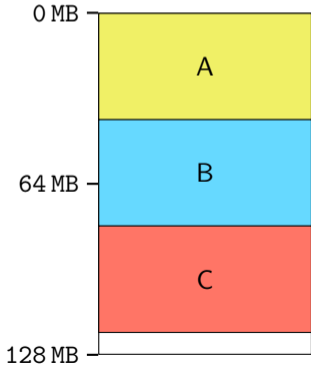


FRIEDRICH-ALEXANDER  
UNIVERSITÄT  
ERLANGEN-NÜRNBERG

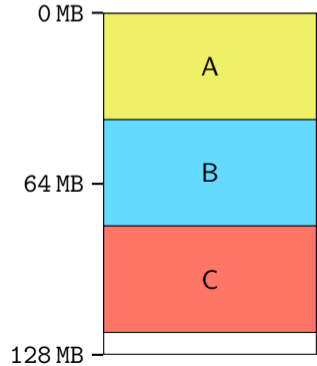
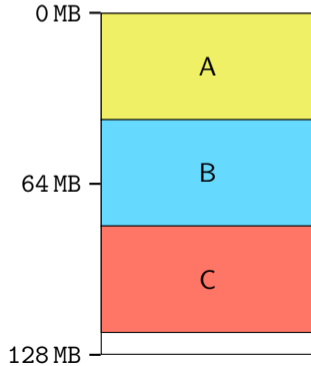
TECHNISCHE FAKULTÄT

## Client-Anwendung 1

WRITE  A 40 MB at offset 0 MB  
WRITE  B 40 MB at offset 40 MB  
WRITE  C 40 MB at offset 80 MB

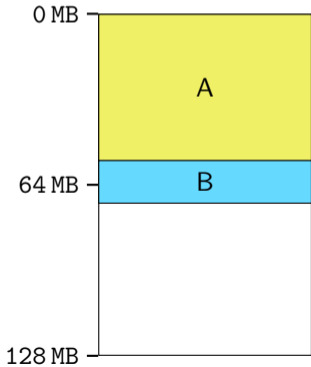


## Client-Anwendung 2

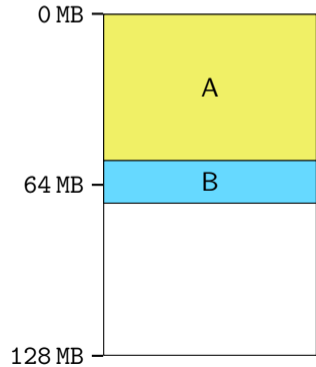
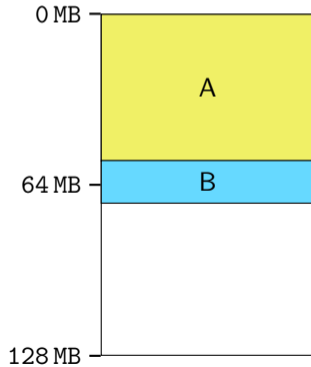


## Client-Anwendung 1

WRITE A 55 MB at offset 0 MB  
APPEND B 16 MB

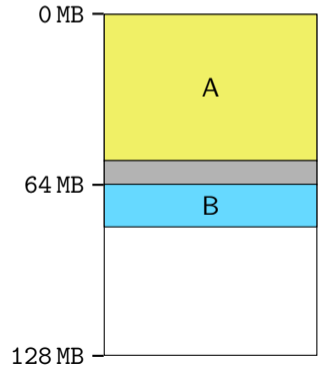
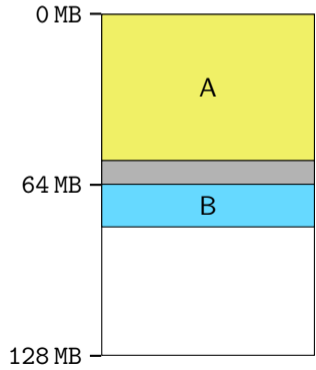


## Client-Anwendung 2

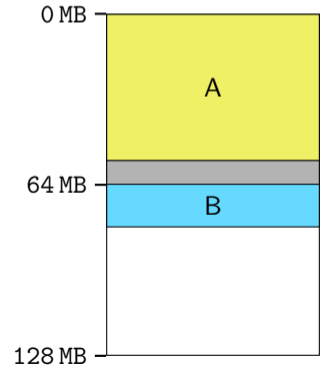


### Client-Anwendung 1

WRITE A 55 MB at offset 0 MB  
APPEND B 16 MB

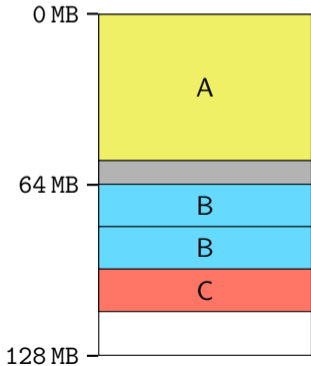


### Client-Anwendung 2

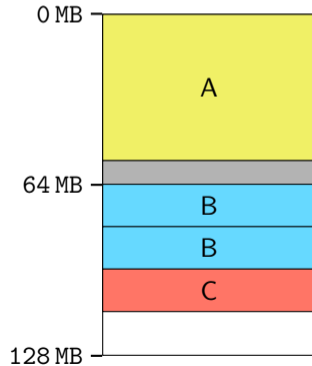
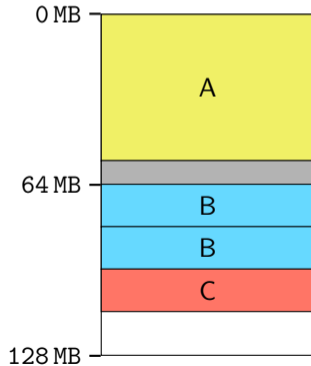


## Client-Anwendung 1

WRITE **A** 55 MB at offset 0 MB  
APPEND **B** 16 MB  
APPEND **C** 16 MB

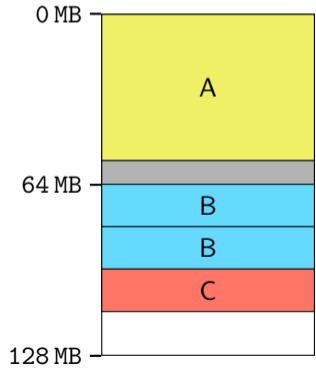


## Client-Anwendung 2

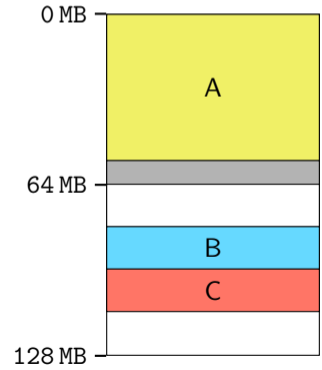
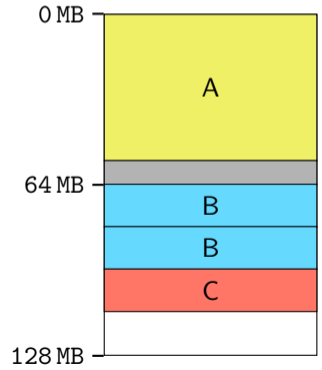


### Client-Anwendung 1

- WRITE A 55 MB at offset 0 MB
- APPEND B 16 MB
- APPEND C 16 MB

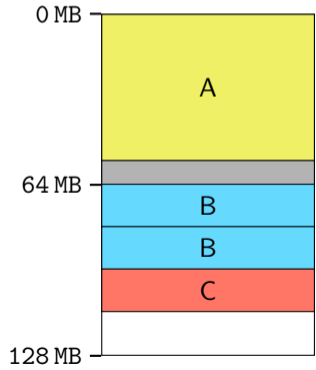


### Client-Anwendung 2

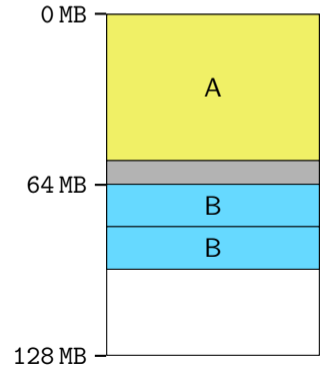
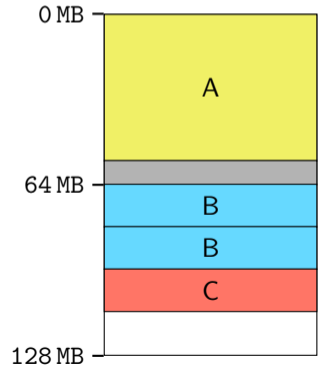


### Client-Anwendung 1

- WRITE A 55 MB at offset 0 MB
- APPEND B 16 MB
- APPEND C 16 MB

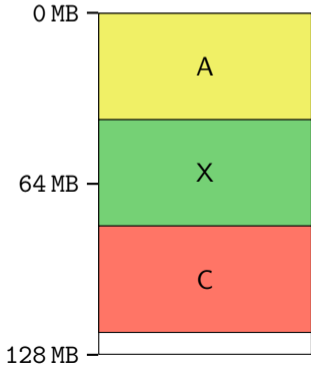


### Client-Anwendung 2



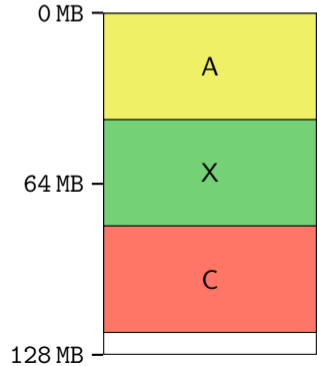
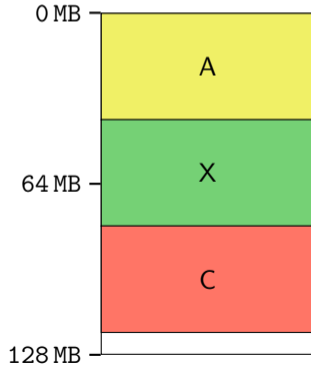
## Client-Anwendung 1

- WRITE A 40 MB at offset 0 MB
- WRITE B 40 MB at offset 40 MB
- WRITE C 40 MB at offset 80 MB



## Client-Anwendung 2

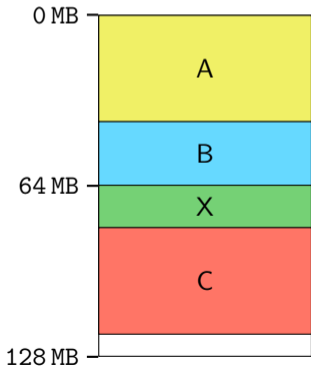
- WRITE X 40 MB at offset 40 MB





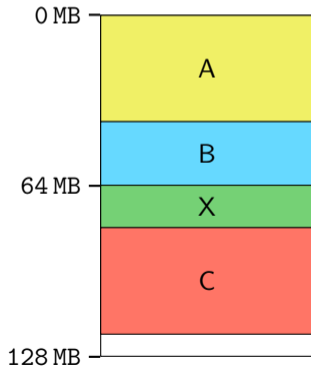
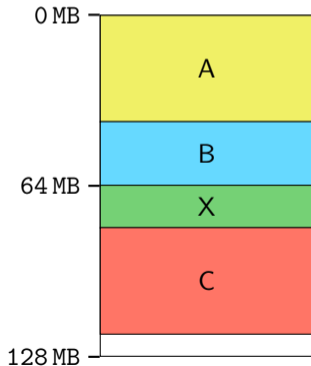
## Client-Anwendung 1

WRITE A 40 MB at offset 0 MB  
WRITE B 40 MB at offset 40 MB  
WRITE C 40 MB at offset 80 MB



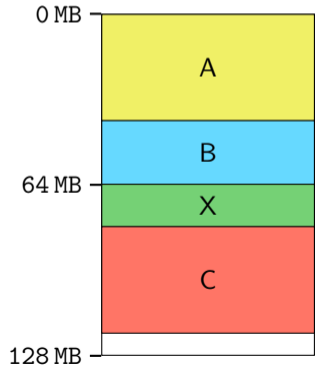
## Client-Anwendung 2

WRITE X 40 MB at offset 40 MB



### Client-Anwendung 1

- WRITE A 40 MB at offset 0 MB
- WRITE B 40 MB at offset 40 MB
- WRITE C 40 MB at offset 80 MB



### Client-Anwendung 2

- WRITE X 40 MB at offset 40 MB

