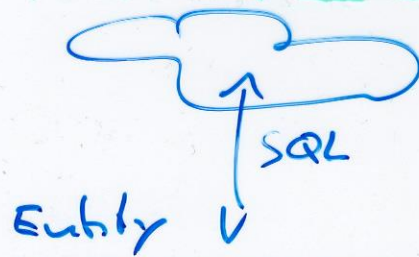


Flpp

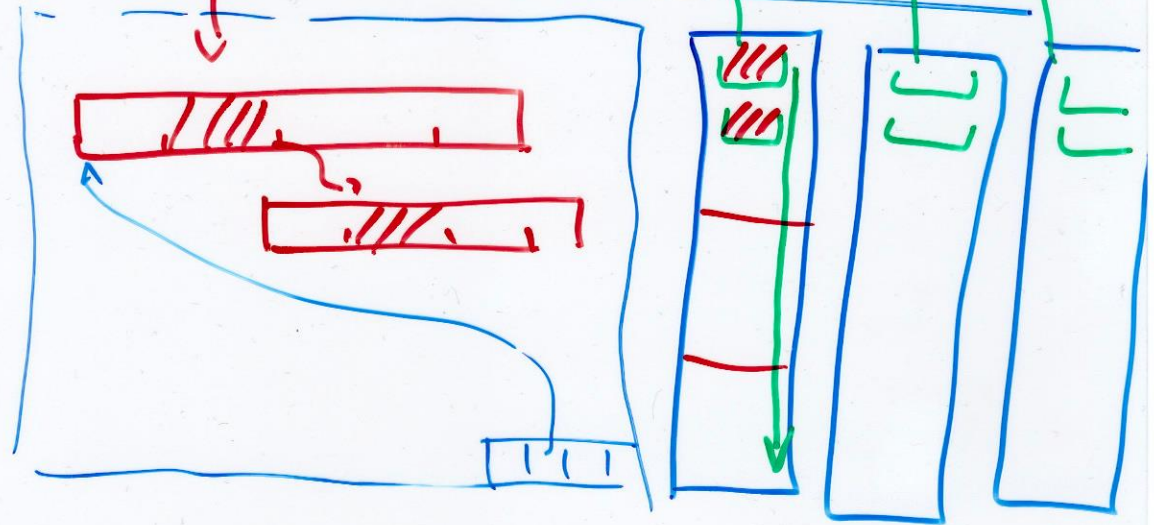
12.11.2013

①



log Ebene

phy Ebene



OLTP - Transactional

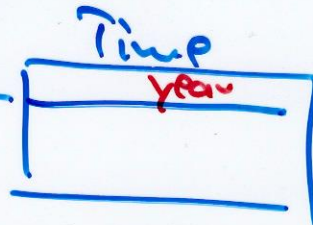
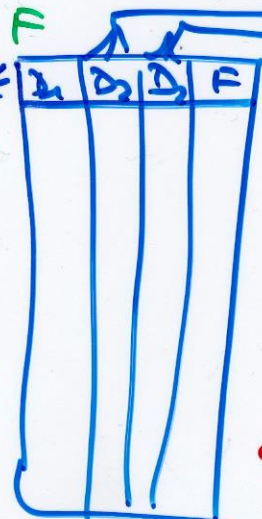
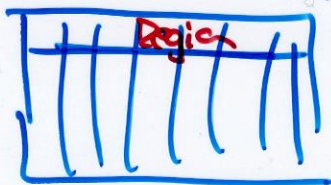
↳ ganze Einheiten

OLAP - Analytical

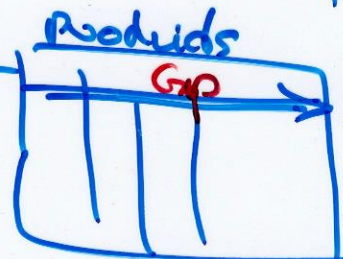
↳ Menge von Teilen von Einheiten

Star Schema

Shop (40000)



30000



15000

sel. Region = 'Sachsen'
Year = '2013'
ProdGrp = 'TV'

glb Brand, Weeks, Städte

Main-Memory DB ?

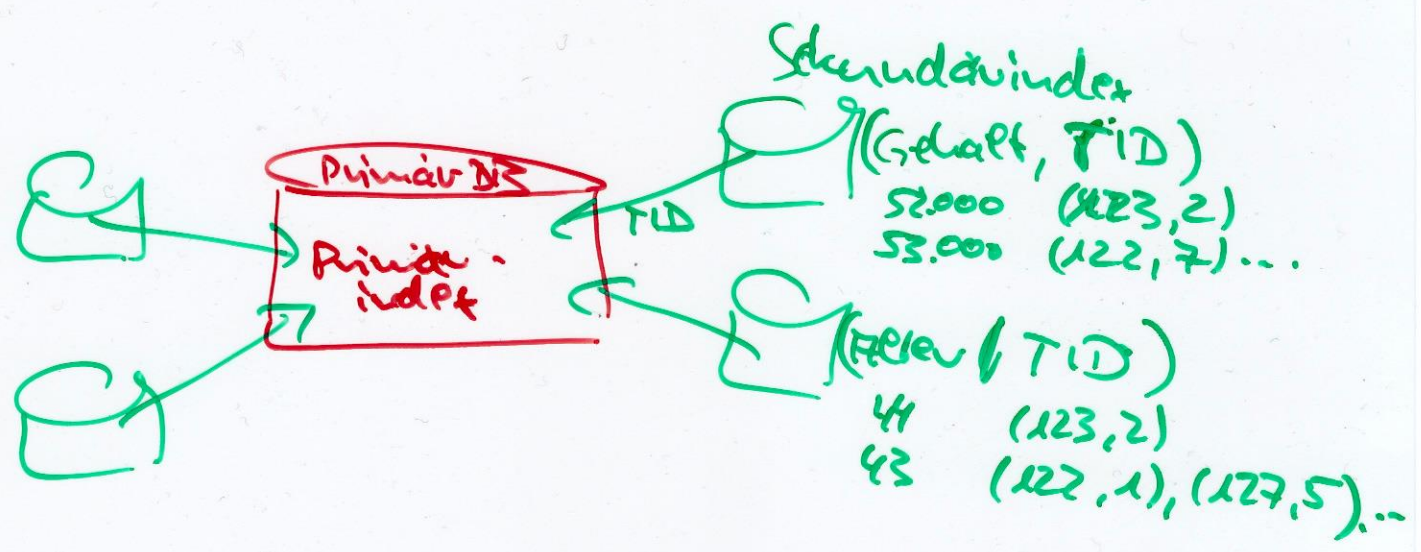
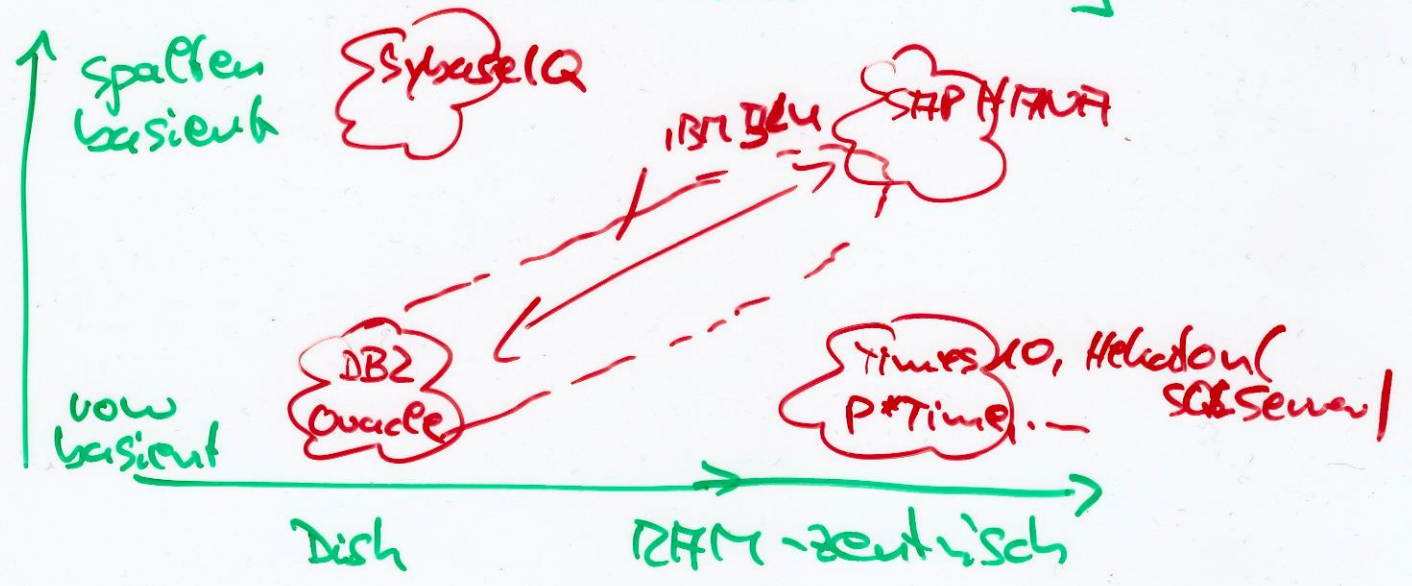
→ 1) RAM teuer \$

→ komprimiert

→ spaltenbasierte Abfrage

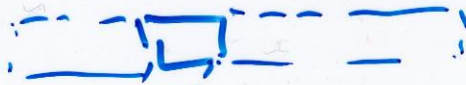
2) RAM-Zugriff ist teuer (perf.)

→ Cache-Nutzung



diskzentrisch
RAM << |DB|

RAM



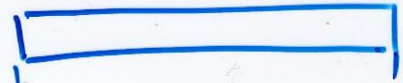
Disk



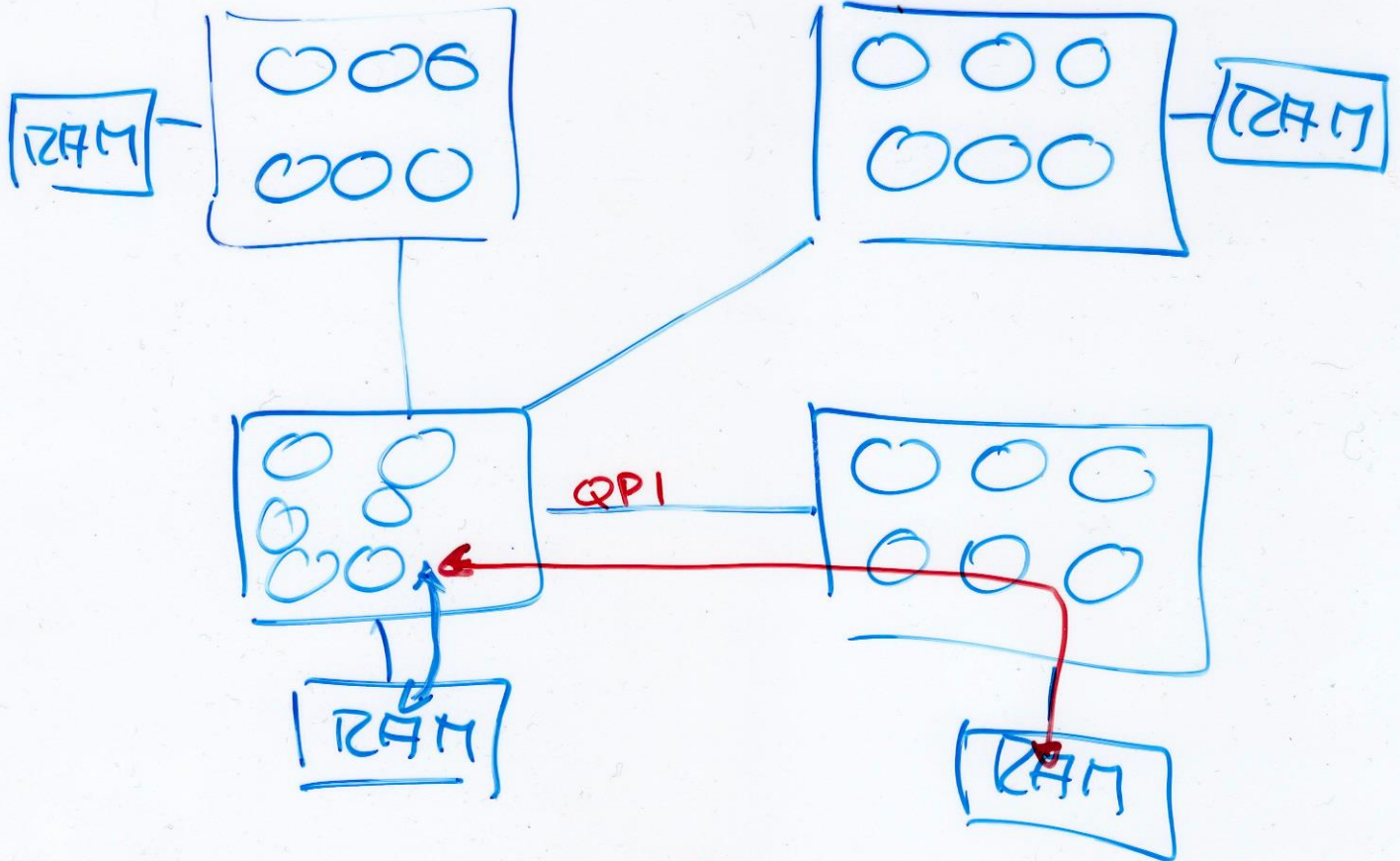
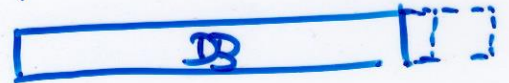
expliziter
Verdrängungs-
mechanismus

mem.-zentrisch

3



implizit
durch Paging
auf OS-Ebene



1 Loop 2 5%
2
3 100%