

Cluster

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# Cluster

Nils Meyer  
Sector Nord AG

Workshop 2013



# Einleitung

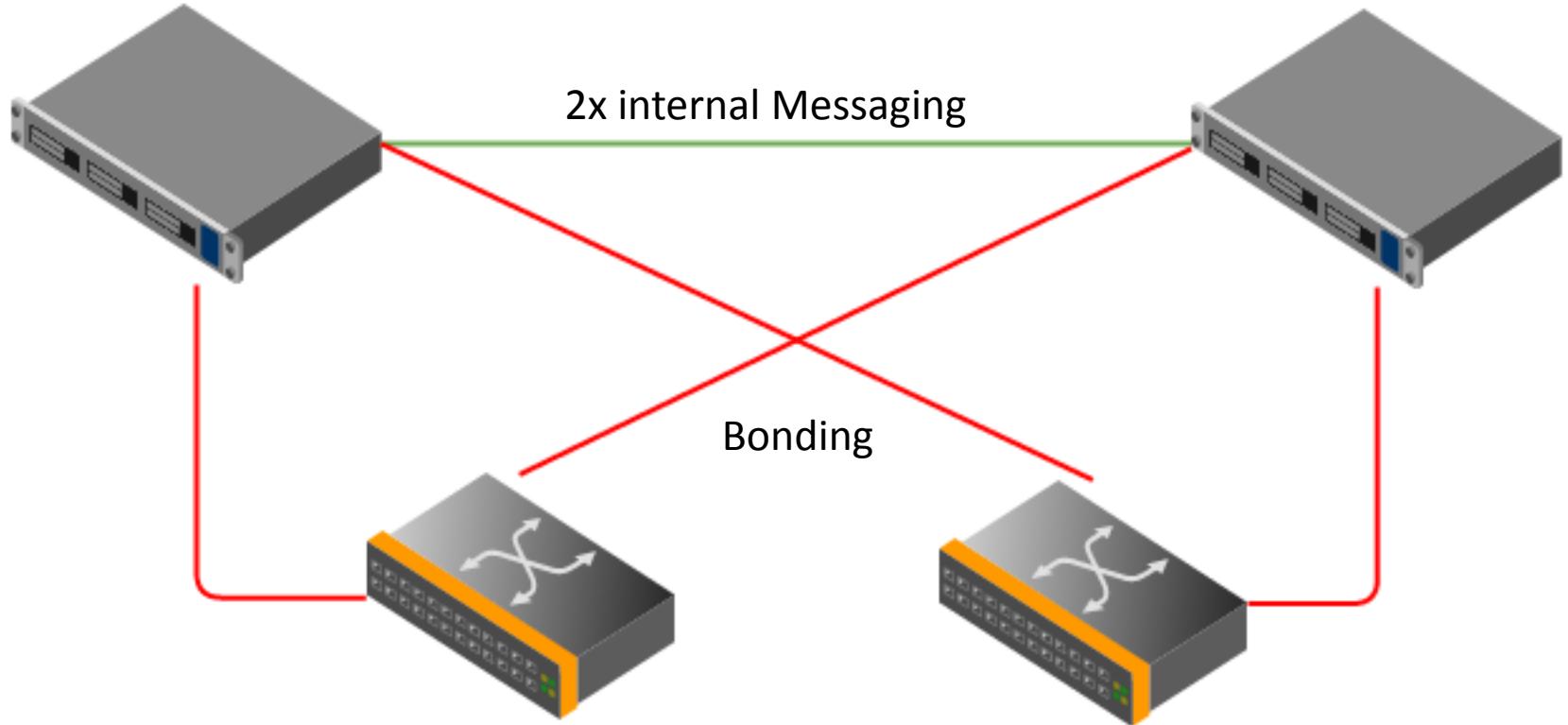
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$$\text{Verfügbarkeit (in Prozent)} = \left( 1 - \frac{\text{Ausfallzeit}}{\text{Produktionszeit} + \text{Ausfallzeit}} \right) \cdot 100$$



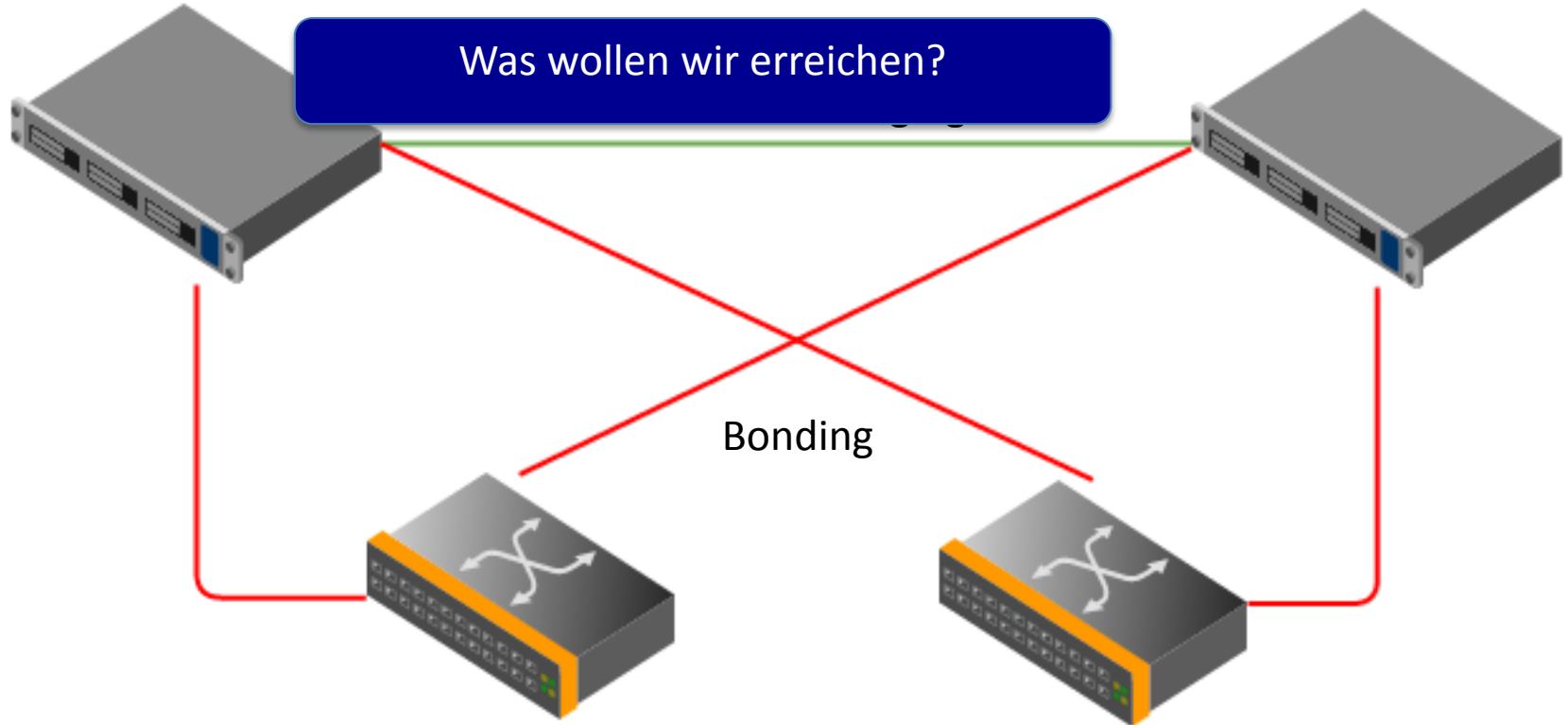
# Konzept

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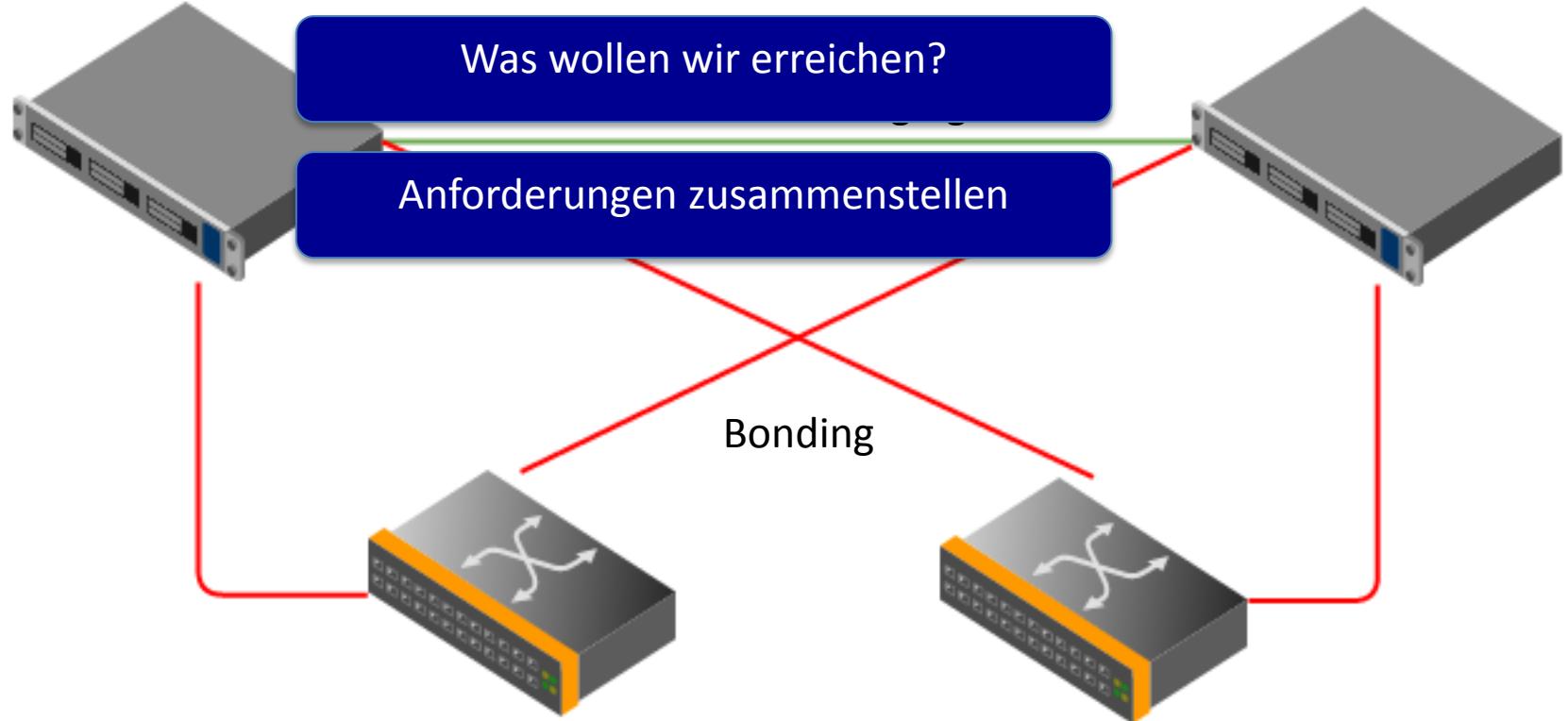
# Konzept

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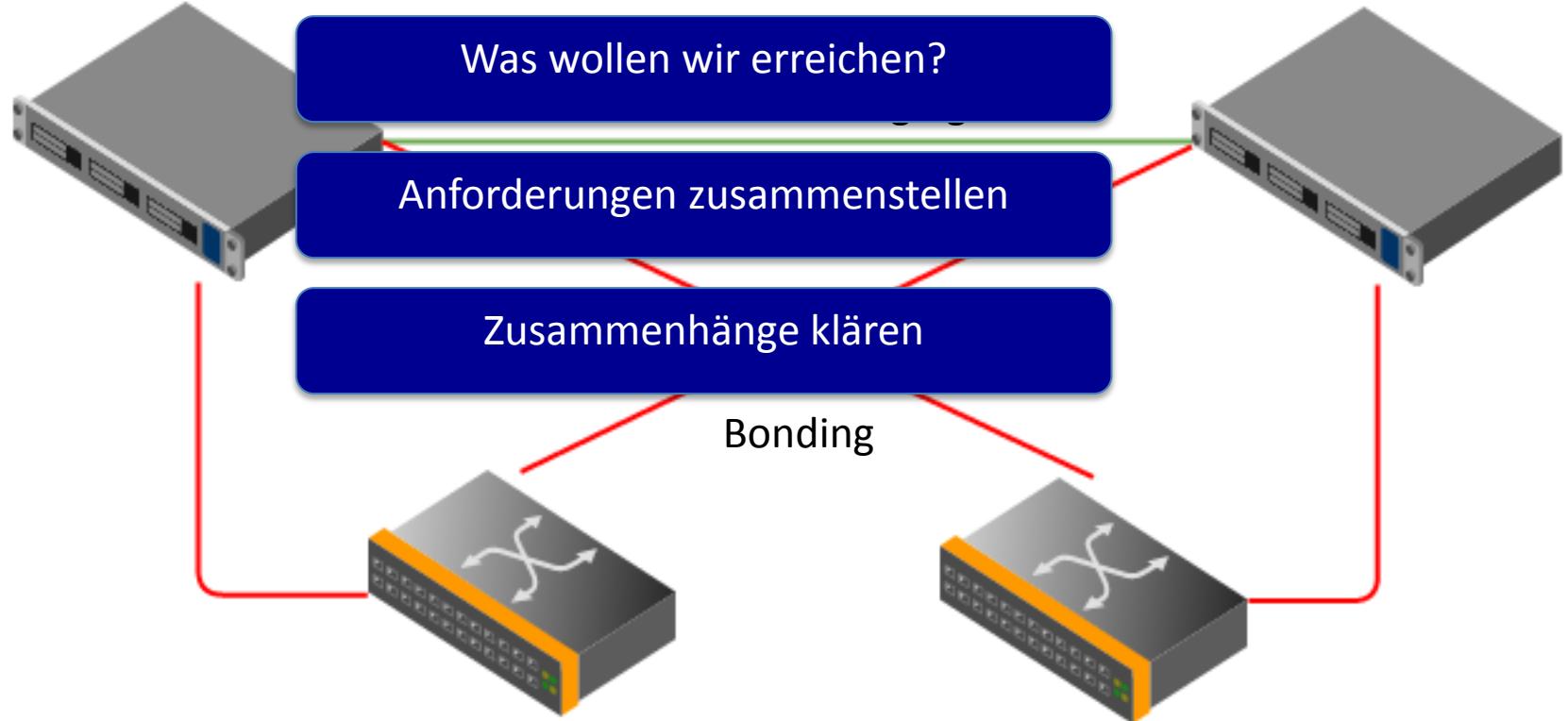
# Konzept

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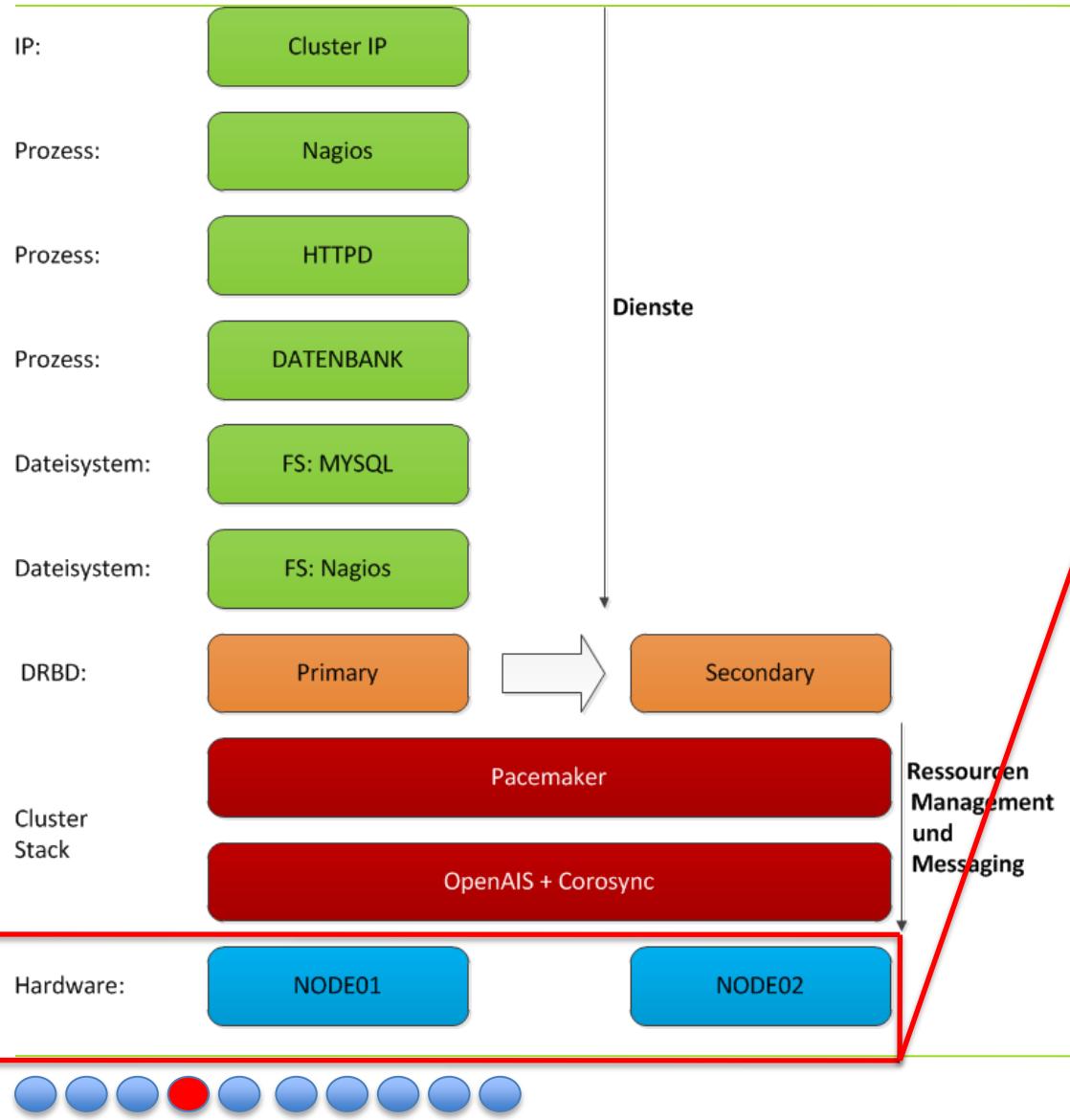


# Konzept

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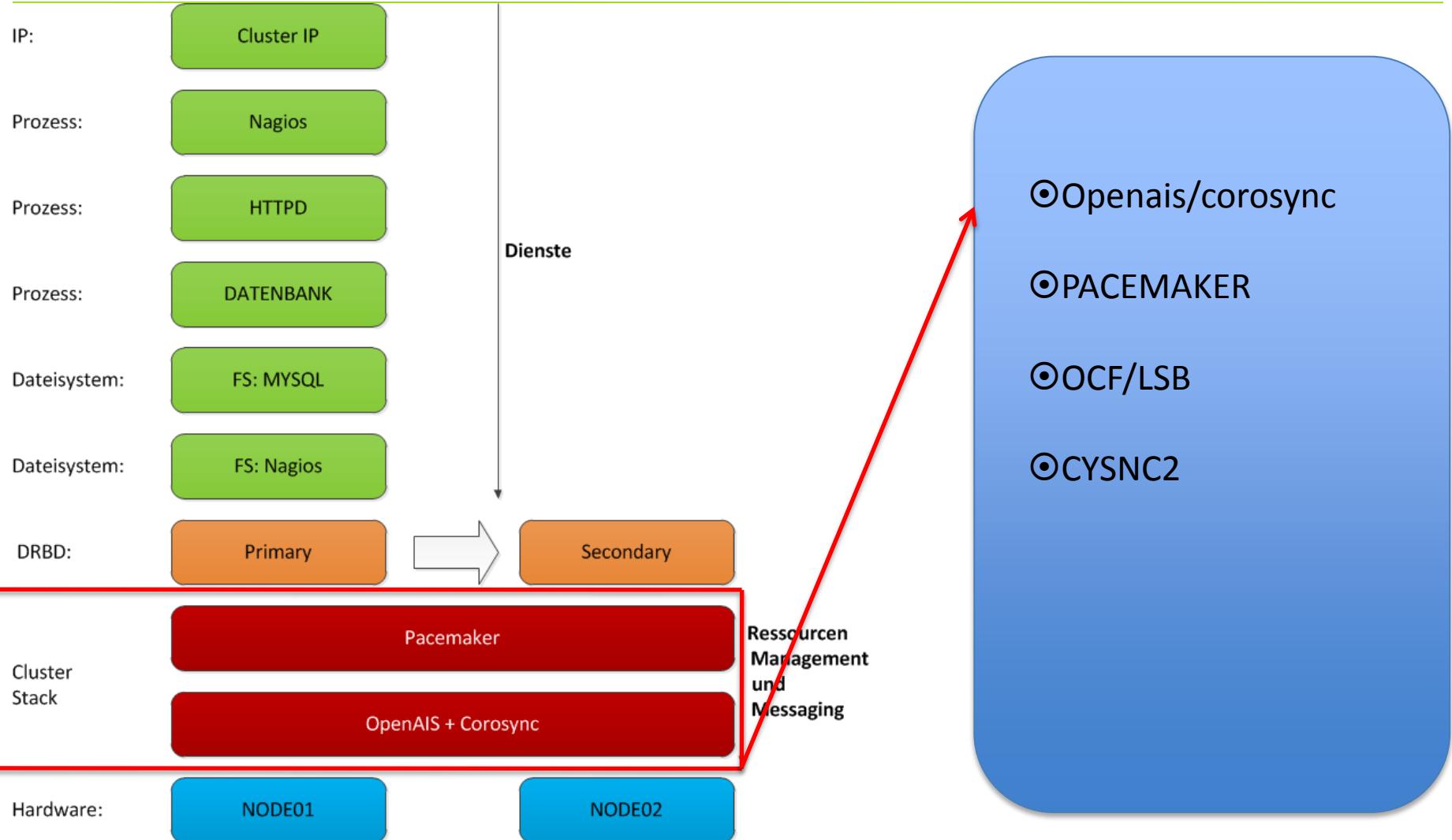
# Technik: Hardware



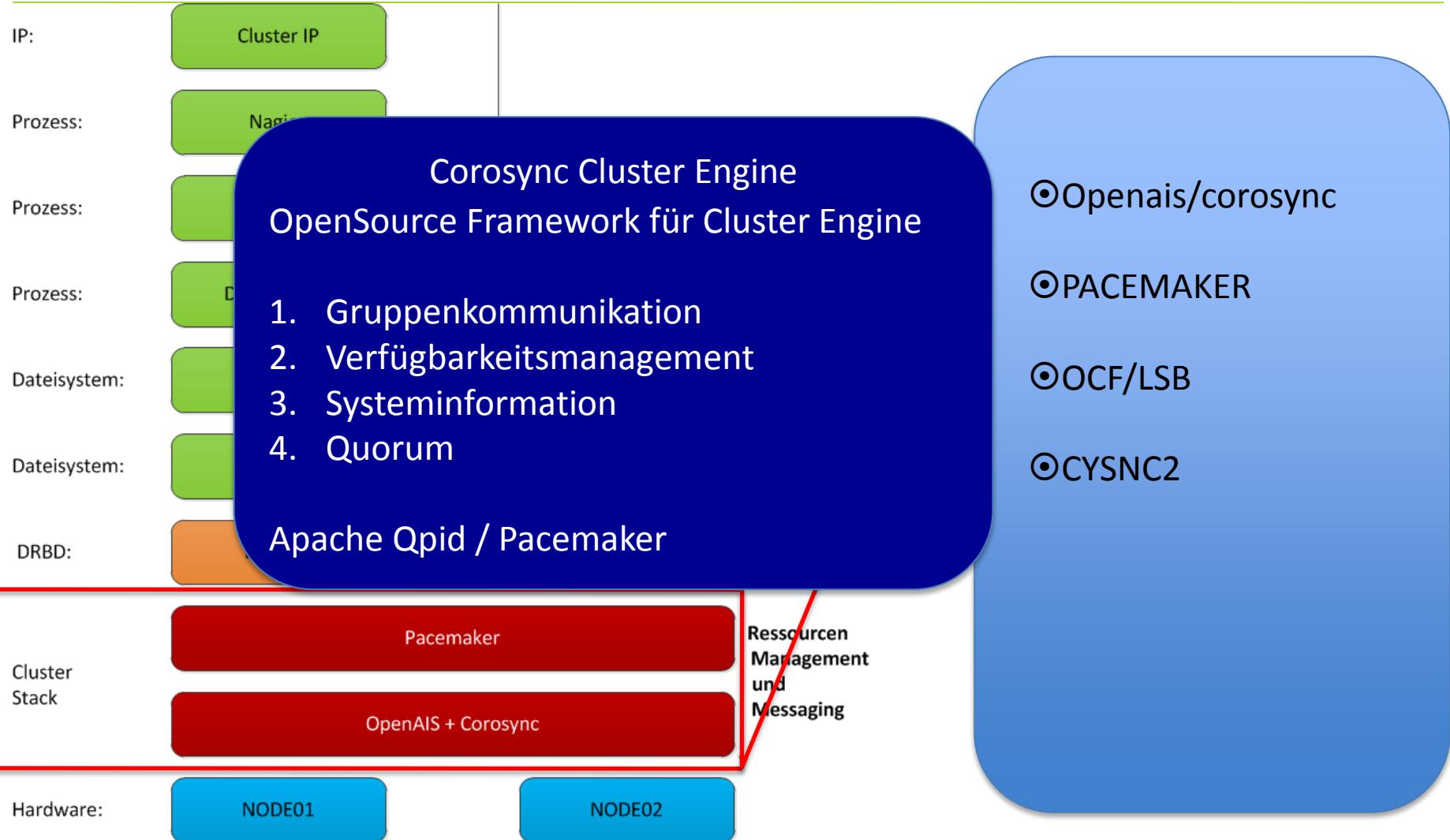
- Gleichwertige Systeme
- 2x 4 Core CPU
- 8-16 GB RAM
- Storage:
  - SSD (min. 2)
  - HDD (min. 4)
- 2x Power Supply
- 4x LAN



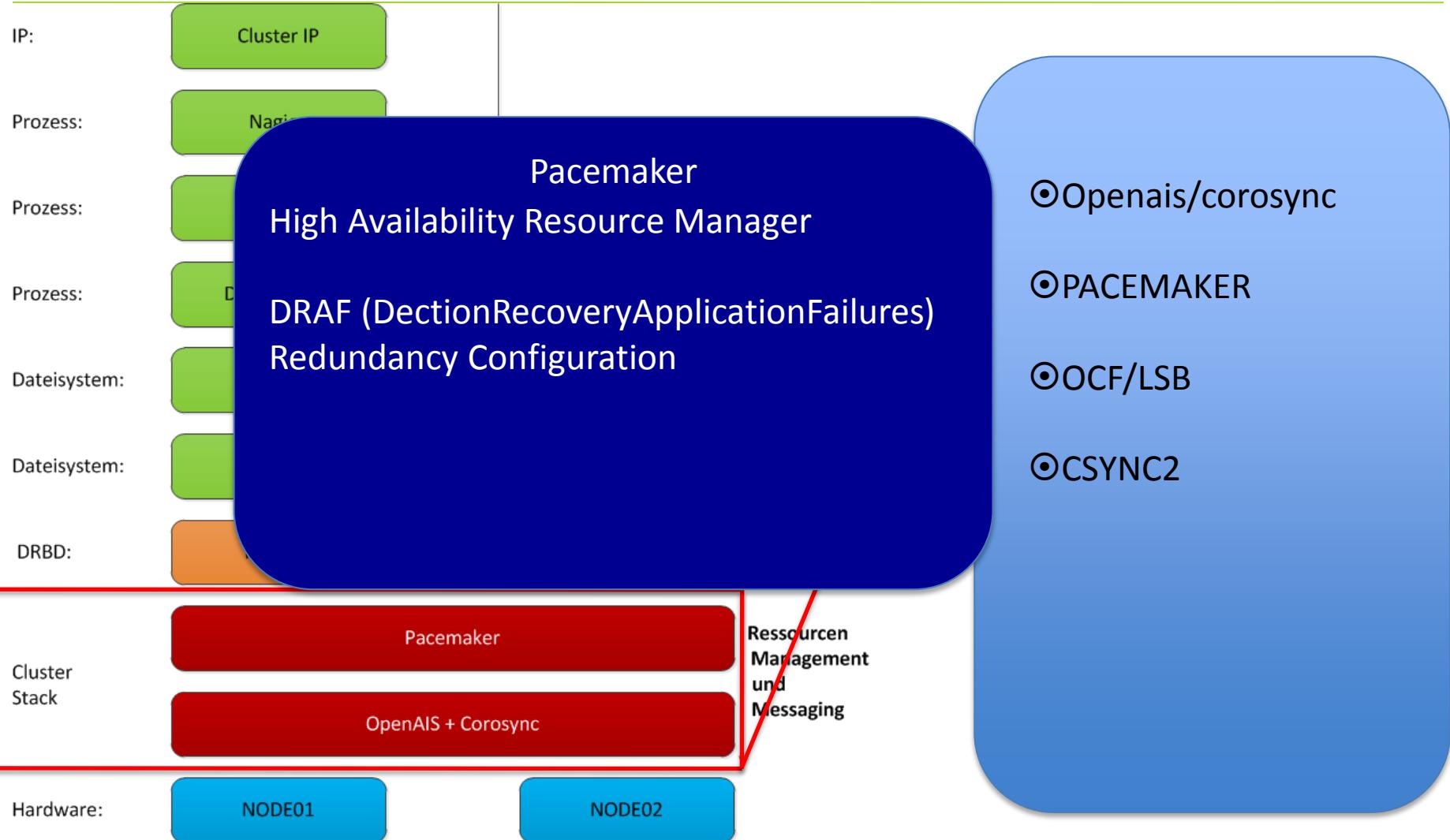
# Technik: „Cluster Stack“



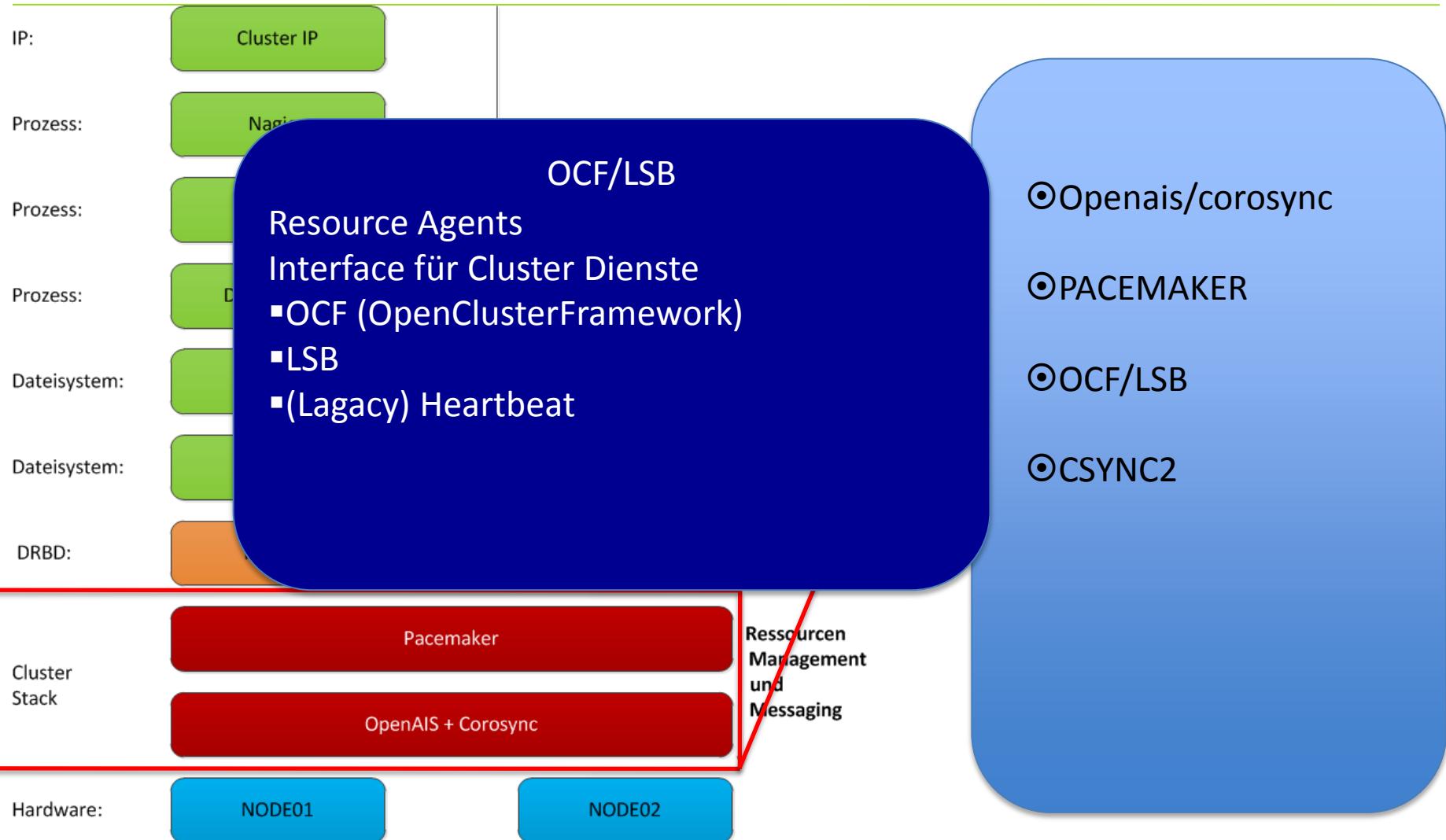
# Technik: „Cluster Stack“



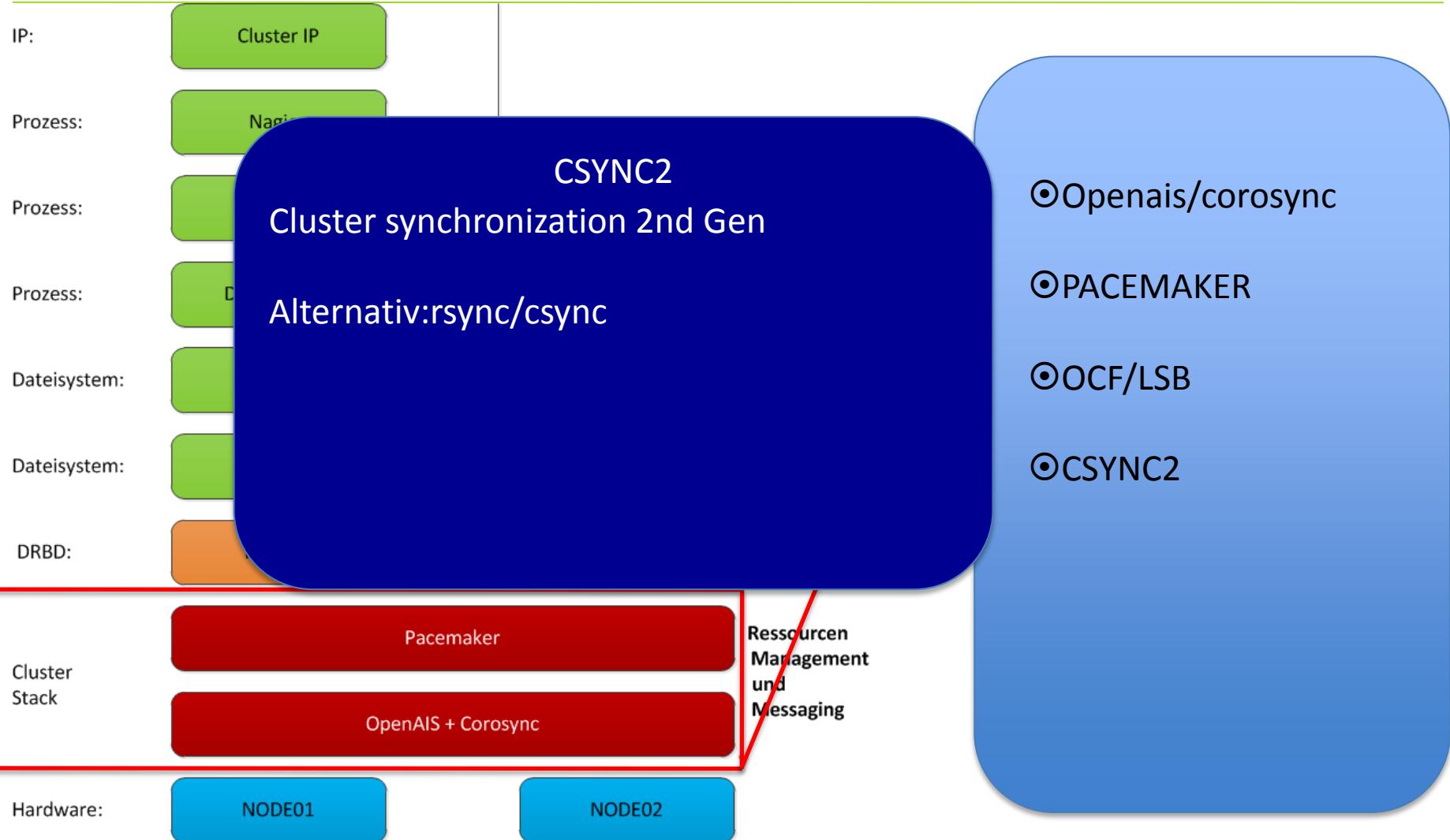
# Technik: „Cluster Stack“



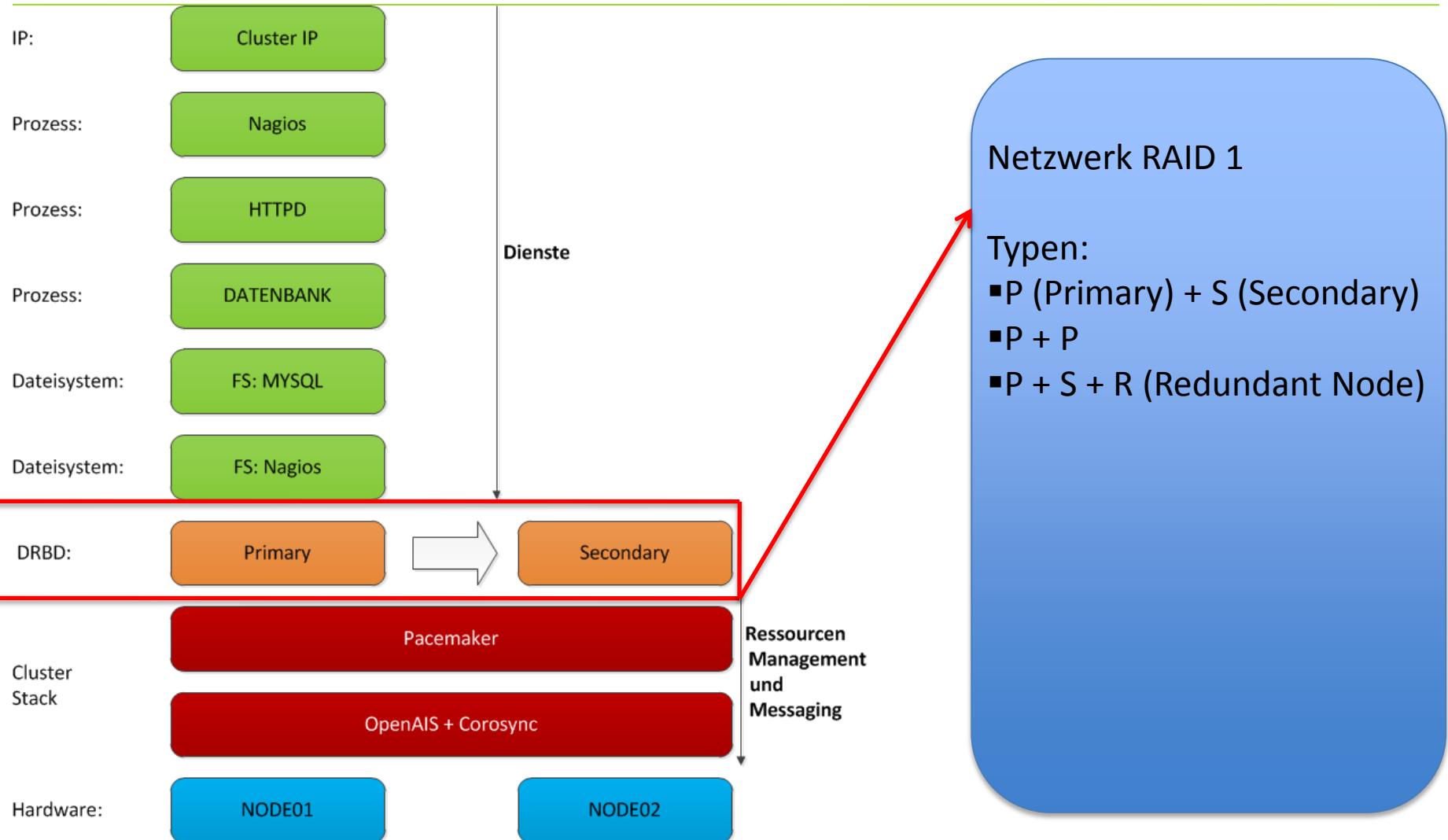
# Technik: „Cluster Stack“



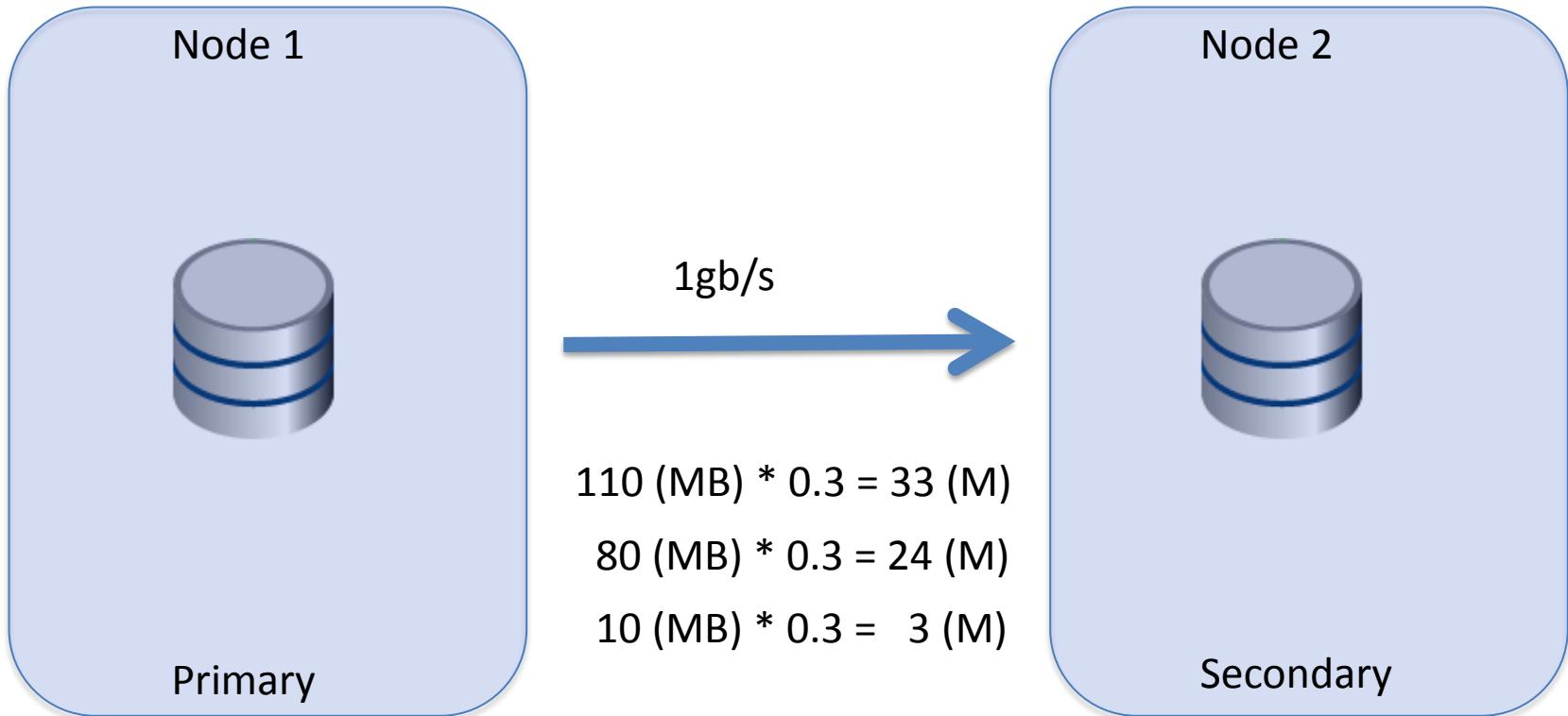
# Technik: „Cluster Stack“



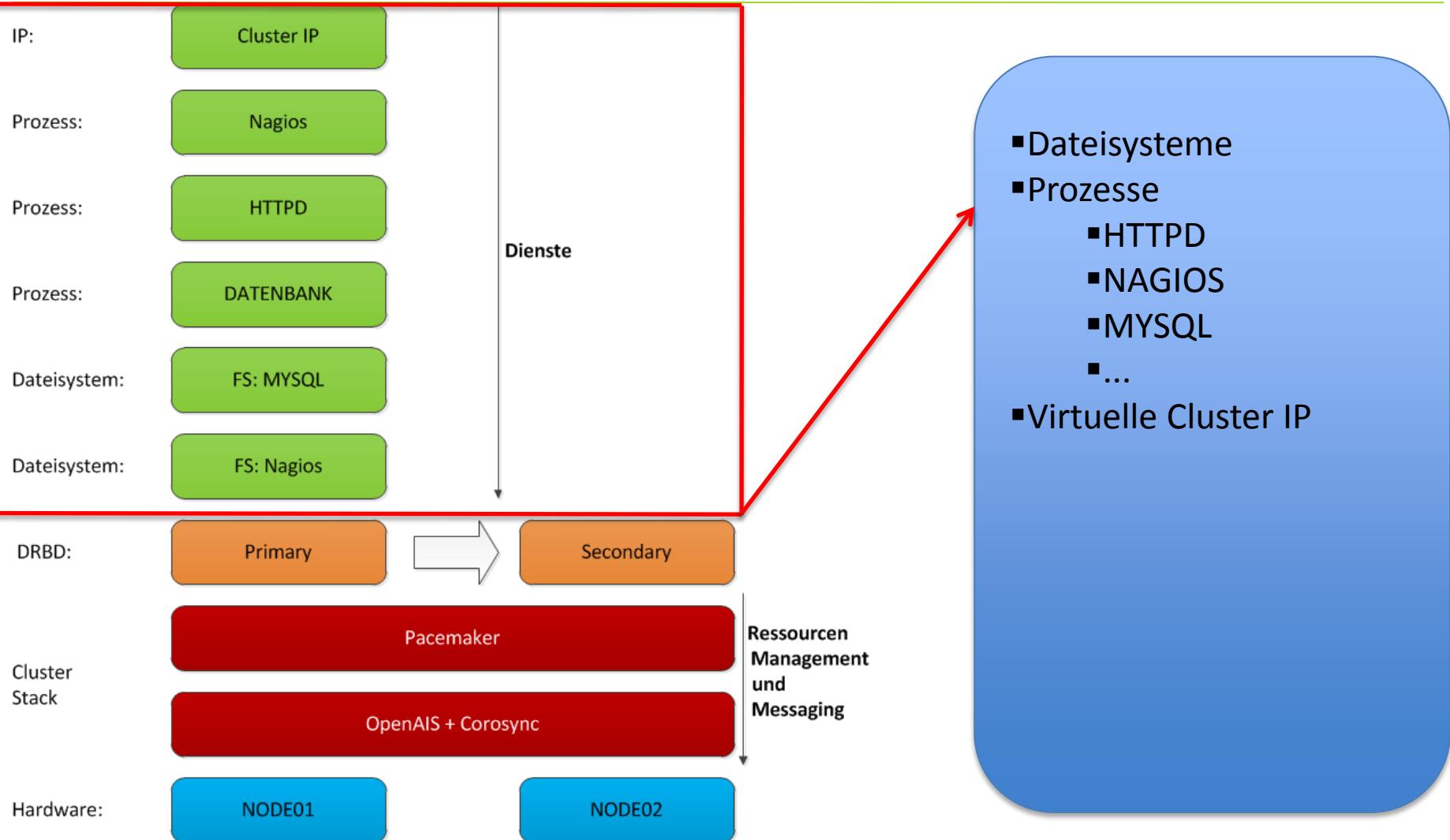
# Technik: Distributed Replicated Block Device



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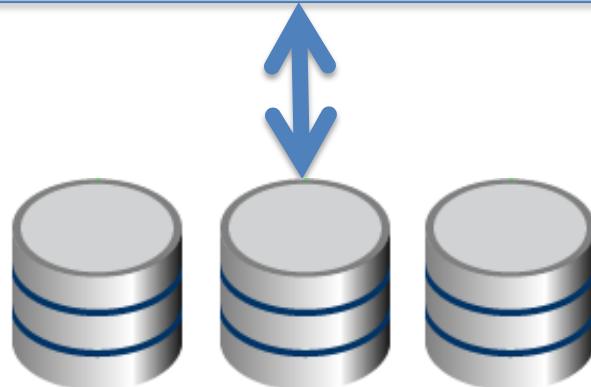
# Technik: Dienste



## Known Problem: IO

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```
01010101000111000111100001110100101010  
0101010111000100101010101010101001  
1010101010101011100010101010101000101  
101001010101010010101001010101011001  
001110001000110010101010101010010101  
001010101010111000110101010010101011  
010101010101010101010101010101010011  
10101010101001010101001010101010101011
```



# Known Problem: IO

Database

Nagios/Checks

```
01010101000111000111100001110100101010  
010101011100010010101010101010101001  
1010101010101011100010101010101000101  
101001010101001010101001010101011001  
001110001000110010101010101010010101  
001010101010111000110101010010101011  
0101010101010101010101010101010011  
10101010101001010101001010101010101011
```

rrd

status.dat

