

Wei weekly Spring 2026
20260127

Hardware resource allocation (baseline)

Org	Peer	CPU	RAM	CPU Total	RAM Total	CPU Total Per Org	RAM Total Per Org		
Org1	Peer1 (Fabric, endorser)	4 cores	8 GB	8 cores	16 GB	16 cores	32 GB		
	Peer1 (CouchDB)	4 cores	8 GB						
	Peer2 (Fabric, non-endorser)	4 cores	8 GB	8 cores	16 GB				
	Peer2 (CouchDB)	4 cores	8 GB						
Org2	Peer1 (Fabric, endorser)	4 cores	8 GB	8 cores	16 GB	16 cores	32 GB		
	Peer1 (CouchDB)	4 cores	8 GB						
	Peer2 (Fabric, non-endorser)	4 cores	8 GB	8 cores	16 GB				
	Peer2 (CouchDB)	4 cores	8 GB						

Hardware resource allocation (Imbalanced)

Org	Peer	CPU	RAM	CPU Total	RAM Total	CPU Total Per Org	RAM Total Per Org		
Org1	Peer1 (Fabric, endorser)	6 cores	8 GB	12 cores	16 GB	24 cores	32 GB		
	Peer1 (CouchDB)	6 cores	8 GB						
	Peer2 (Fabric, non-endorser)	6 cores	8 GB	12 cores	16 GB				
	Peer2 (CouchDB)	6 cores	8 GB						
Org2	Peer1 (Fabric, endorser)	2 cores	8 GB	4 cores	16 GB	8 cores	32 GB		
	Peer1 (CouchDB)	2 cores	8 GB						
	Peer2 (Fabric, non-endorser)	2 cores	8 GB	4 cores	16 GB				
	Peer2 (CouchDB)	2 cores	8 GB						

Performance comparison

Balanced:

Successful Txn	Goodput (Succ Txn/sec)	Success rate (%)	Avg Latency (sec)
119119	132.35444444	88.22976076	4.51
119357	132.6188889	88.406044	4.52
119144	132.38222222	88.24827791	4.58
119294	132.5488889	88.35938079	4.56

Imbalanced:

Successful Txn	Goodput (Succ Txn/sec)	Success rate (%)	Avg Latency (sec)
112492	124.99111111	83.32123546	0.24
112522	125.02444444	83.34345604	0.24
116062	128.9577778	85.96548404	0.24
116512	129.4577778	86.29879268	0.24

Observations

- Imbalanced Organizations do have impact on performance
 - Caused by one Org's low CPU cores assigned
- Imbalanced setup has lower average latency and lower effective throughput

Next steps

- Integration of more chaincodes/workloads
- More system setups
 - One node – one peer
- **Storage resource monitoring**
- ~~Different phases, different hardware resource allocating~~