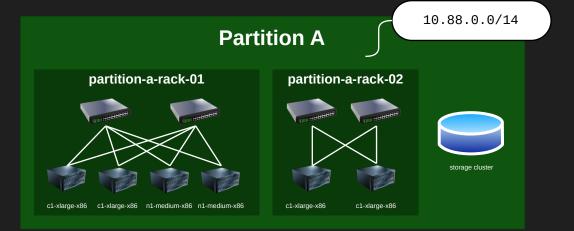


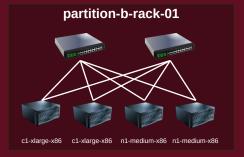
Multi-Partition-Layout

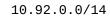












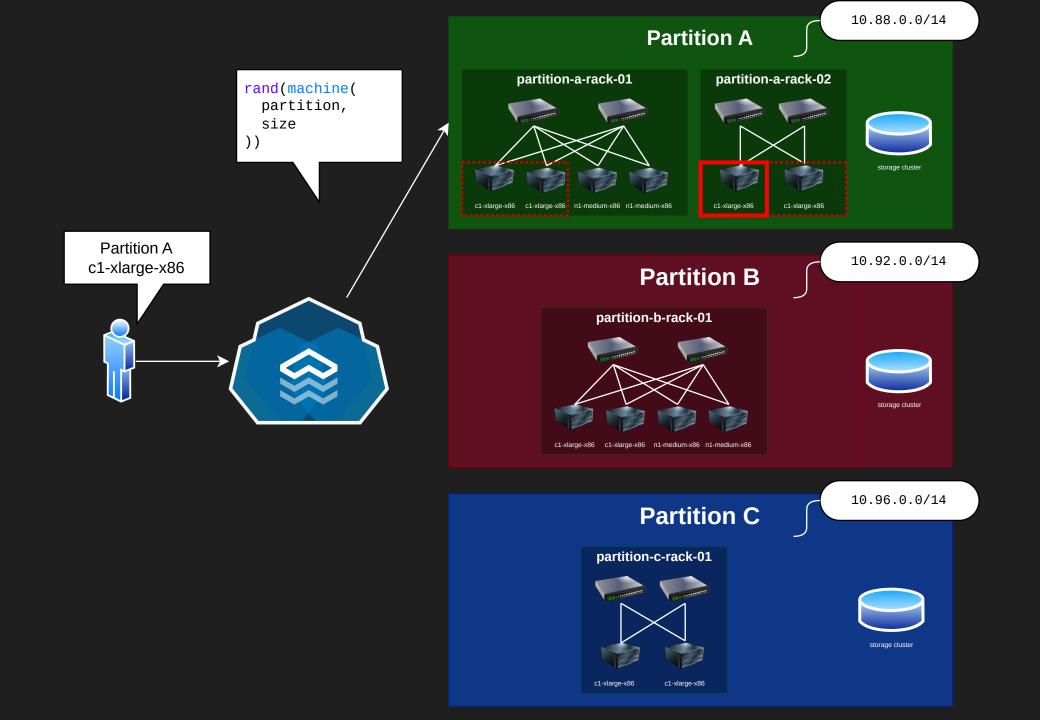


Partition C



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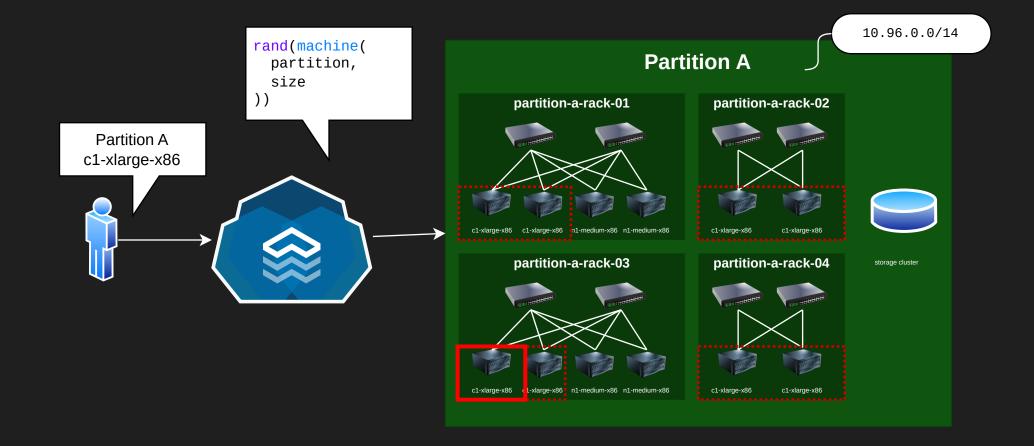




Eigenschaften Multi-Partition-Layout

- Fully independent locations with own storage and own node networks
- Clusters can only be created independent in every location
 - Failover mechanism for deployed applications requires duplicated deployments, which can serve indepedently
 - Failover through BGP
- If cluster nodes are spread across partitions (not implemented yet), nodes will not be able to reach each other
 - Would require an overlay network for inter-node-communication

Single-Partition-Layout



Eigenschaften Single-Partition-Layout

- Multiple groups of racks at multiple locations but connected to same CLOS topology
- All racks can connect to the same storage network
- Nodes in private networks can communicate
- When creating a cluster, nodes will be randomly spread across the racks
 - Possible improvement of this situation, see MEP-12: Rack Spreading

MEP-12: Rack Spreading

- Instead of selecting a machine from a machine pool randomly
- Get all existing machines in the same project and count to which rack they belong
- Place machine on the rack with the least amount of machines already allocated
- Best effort only