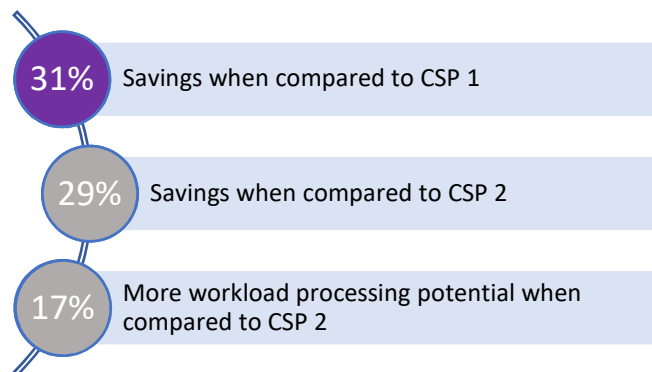


Comparing the Cost Efficacy of Dell EMC PowerEdge R940 vs. Cloud Providers

Dell EMC PowerEdge Insights

Dell Technologies commissioned Krystallize Technologies to compare the cost effectiveness and performance capability of their Dell EMC PowerEdge R940 server for SAP HANA databases with two major Cloud Service Providers (CSPs). Krystallize Technologies assessed platform capability with their patented technology to synthetically reproduce SAP HANA benchmark and evaluate cost efficiency.



Krystallize Methodology

Krystallize Technologies creates synthetic workloads to provide insight to the true capabilities of the cloud providers and their services. The CloudQoS[®] CSP Service Capability Index (SCI) executes a standardized synthetic workload that concurrently exercises all system resources while collecting the platform performance measures.

A synthetic workload was created based on common SAP HANA benchmarking for Dell Technologies SAP Performance Lab. This synthetic benchmark enabled Krystallize to compare the overall performance of the Dell EMC PowerEdge R940 server to the two CSPs over a one-week period.

Workload Processing Comparison

Using the Krystallize Technologies Service Capability Index (SCI), the workload processing capabilities of the three platforms are comparable, with Dell EMC PowerEdge R940 and CSP 1 displaying greater capability than CSP 2.

Most Cost Effective			
Dell Technologies		CSP 1	CSP 2
3-Year Cost \$ 127,702.95		3-Year Cost \$ 186,068.16	3-Year Cost \$ 178,946.40
Best	88.03 kOps/Sec	Best	91.30 kOps/Sec
Average	79.54 kOps/Sec	Average	79.83 kOps/Sec
Least	73.18 kOps/Sec	Least	72.98 kOps/Sec
		Best	75.17 kOps/Sec
		Average	67.75 kOps/Sec
		Least	61.23 kOps/Sec

Krystallize Technologies Service Capability Index indicated workload processing parity between CSP 1 and Dell Technologies.

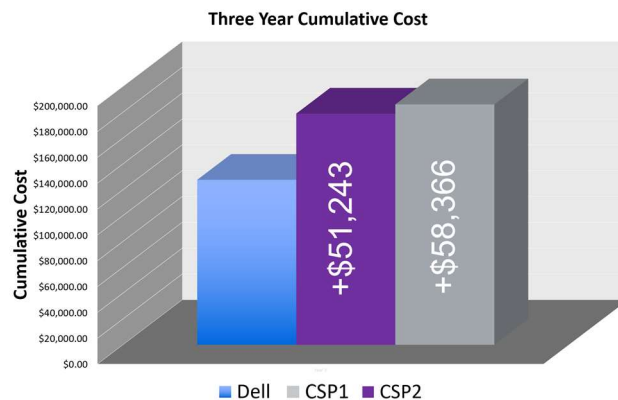
Cost Comparison

With comparable performance, The Dell EMC PowerEdge solution stood out for its cost savings over the Cloud Service Providers.

The estimated platform cost considered a list price comparison of offerings for the direct hard costs of the tested configuration.

	Dell Technologies R940	CSP 1	CSP 2
3-year cost	\$127,702.95	\$186,068.16	\$178,946.40
Cost Premium	0%	+31%	+29%

When leveraging a three-year depreciation schedule the Dell EMC PowerEdge savings added up year over year.



Conclusion

The Dell EMC PowerEdge server provides a more cost-effective solution than comparable compute instances from two major Cloud Service Providers.



This document is provided for information purposes only and the results apply to this specific test configuration.