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.

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.

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.